NEMs
Scoping Slivers-of-Time Working

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Introduction

The concept of NEMs is to more efficiently match workers unused, but available hours with employers’ requirements for workers’ time and skills, by allowing people to sell “slivers” of their time to employers in a dynamic way.

The business case for NEMs depends upon the number of hours that go unsold each year, that could be sold using “Slivers-of-Time” (SoT) working via NEMs, and also upon the level of demand for those hours amongst potential employers.

As a starting point, we have therefore attempted to quantify the number of people who are currently not working, or are working under-capacity and could in theory be candidates for selling their time and skills via NEMs. We call this the “Supply-side” of the equation. We have also attempted to describe the “Demand-side” – i.e. employers’ demand for SoT workers, but as we will explain, it is only possible to provide partial insights and not to quantify potential demand using available published data.

THE SUPPLY-SIDE OF THE EQUATION

Q: How large is the potential pool of workers who might use NEMs for Slivers-of-Time working?

We can not gain any insights into peoples’ likely willingness or ability to work in SoTs from secondary data sources, nor their likelihood to use this kind of an online exchange to find SoT-type employment. Insights of this nature could only be gleaned by conducting a quantitative survey. However, we have made some assumptions about the groups of workers who might form part of the potential pool from which SoT workers might be drawn and have attempted to quantify that potential pool.

Please see accompanying Excel spreadsheet for the full model of categories of employees/potential employees included or excluded from the potential pool.

People in employment

Full-time employees

We have excluded from the potential pool of SoT workers the 21.3 million people employed full-time, since they are deemed to be working at full capacity. However, it could be that some employees currently employed full-time might prefer the SoT mode of working to achieve greater flexibility than that offered by current regular hours, or shift patterns.

The figure for full-time employees includes students who work full-time (we estimate around 400,000), as well as the 171,000 people over normal retirement age who still work full-time.

Part-time employees

All part-time employees have been included in the potential pool of SoT workers, as they are possibly working below capacity and could be prime candidates for working additional hours via SoT. However, it should be noted that it is not possible to
speculate as to how many part-time workers would be willing to work more hours or might be open to SoT working as a more flexible alternative.

Around half a million of the 7.1 million part-time workers are believed to want to work full time\(^1\). These could be particularly strong candidates for SoT working, as they have expressed a desire to increase their working hours.

Of the remainder, the majority are reported to work part-time through preference, with 175,000\(^1\) doing so due to illness/disability and 1,130,000 being students/ at school\(^1\). Their capacity / desire for increased working hours is not known.

**Temporary / Casual workers**

Existing temporary, casual and seasonal workers are a key target group for SoT working. We have included in the potential pool all known temporary, casual and seasonal workers, except for temps on a fixed-term contract, whom we view as quasi full-time employees. We have therefore included 255,000 agency temps, 251,000 known casual workers and 62,000 known seasonal workers\(^1\). In reality, there are likely to be many more “unofficial” casual and seasonal workers who are not captured in the annual Labour Force Survey. We have not found any verifiable or consistent estimates for numbers of unofficial workers.

**Self-employed**

There are 3,623,000 self-employed workers in the UK, of whom 2,805,000 work full-time and 818,000 work part-time\(^1\). We believe there could be great potential for people who are self-employed in certain job-based trades and professions (e.g. plumbers, electricians, window-cleaners) who already work in an SoT-type mode, to trade their services via the proposed exchange.

However, there is no comprehensive data available to enable us to quantify the number of people that are self-employed in these kinds of trades. Hence, for the purposes of the overall estimate, we have only included part-time self-employed people.

**People who are unemployed, but seeking work**

There are officially 1,395,000\(^1\) unemployed people in the UK. These people are defined as:

- without a job, want a job, have actively sought work in the last four weeks and are available to start work in the next two weeks;
- or
- out of work, have found a job and are waiting to start it in the next two weeks.

Of these, the total number claiming Job Seeker’s Allowance (claimant count) is 855,000\(^4\). We have included JSA claimants in the potential pool, since they are seeking work. We have also included the 72,000 claimants of the New Deal for Lone Parents\(^4\), as these are also people who are actively seeking work and could be key potential candidates for SoT working.

**People who are not economically active – i.e. not in work and not seeking work**
There are 17.5 million working-age people (16-60/65) who are classified as economically inactive\(^1\). Some groups have been ruled out of the potential pool of SoT workers, as they are highly unlikely to be willing or able to work, specifically:

- Working-age people who have retired (588,000)\(^1\)
- The temporarily sick or injured (179,000)\(^1\)

Other groups would clearly be counted among the target pool of potential SoT workers, although we cannot speculate on likely participation:

- People who are looking after the family or home full-time (2,326,000)\(^1\)
- Discouraged workers (those who have given up looking seeking work) and “others/unknown” (901,000)\(^1\)

For other groups of economically inactive people, it is not so clear whether or not they should be counted in the potential pool. For instance, the long-term sick / disabled, of whom there are 2,165,000\(^1\). We have included a proportion of these in the potential pool, since the Government has reported that it believes that up to 75% of the 1,444,000 recipients of Incapacity Benefit (IB) could in fact be involved in some kind of paid employment. The government is aiming to involve 900,000 IB claimants in its “Paths To Work” scheme within two years. Clearly the 295,000 recipients of Severe Disability Allowance\(^5\) and a significant proportion of IB recipients will not be expected to participate.

The final group of economically inactive people are the 1,747,000 students (or 16+ school pupils) who do not currently work\(^1\). For the purposes of this exercise, the non-employed students have not been included in the potential pool. However, it is widely reported that increasing numbers of full-time students will need to work in order to fund their studies. Hence, a significant proportion of students who currently do not work could indeed be candidates for SoT working in the future.

**Those over normal retirement age**

There are currently 10.7 million people in Britain who are over the normal retirement age. However, not all are retired completely: around 9% (972,000) are known to work, of whom 171,000 full-time, 513,000 part-time, 222,000 self-employed\(^6\). These workers have been captured in the categories above and are either included (part-time workers) or excluded (full-time workers) from the potential pool accordingly.

However, there have been many reports that suggest that the number of pensioners that are returning to work (or wish to), either due to increased life expectancy or a need to supplement an inadequate pension is increasing. Hence, although we have not included them in our potential pool of SoT workers, it might be worth bearing in mind that there are 9.8 million\(^7\) pensioners who are not currently working, of whom we estimate around 5.3 million\(^7\) are under the age of 75 and a growing proportion of them may be seeking to return work, at least part-time.

**Conclusion**

Based on all the above assumptions about different groups of workers / potential workers, we estimate that the potential pool of people who could be targets for SoT working could be almost **14 million**. However we would strongly recommend conducting some primary research (a survey) to better understand likely willingness and ability to participate in SoT working and likely uptake of the proposed service.
Sources:

2. Accenture analysis, based on total number of students (HESA) and data from LFS on numbers of students working part-time or not working at all.
3. ONS
4. DWP Job Seeker's Allowance Quarterly Statistical Enquiry: February 2005
5. DWP Incapacity Benefit and Severe Disablement Allowance Quarterly Summary Statistics: February 2005
6. Dept of Work & Pensions
7. Accenture estimates
THE DEMAND-SIDE OF THE EQUATION

Q: How large is the potential demand for Slivers-of-Time labour?

Again, without conducting in-depth primary research, it is not possible to provide insights into companies’ likely propensity to use SoT workers to fulfil permanent or temporary labour requirements. Our intention was therefore to attempt to build a picture of the current use of SoT-type working – either part-time, or temporary workers – overall and by industry.

However, there are no clear and consistent criteria by which to define organisations that are using / could use SoT working, nor of occupations that are / could be filled using the SoT model. Even though an attempt was made to make some assumptions about criteria, there is no published data that would indicate the number of companies or employment positions that would fit those criteria.

There is however some hard data and anecdotal evidence on current levels of part-time and temporary working among different industries that could be a useful indicator of areas of potential demand. We have also provided data on unfilled vacancies and days lost to absence, which are further indicators of potential demand for SoT labour.

Companies’ use of part-time workers

Official data from the ONS Annual Business Inquiry show the levels of employment of part-time workers by industry, average hours worked and average hourly pay – see table below.

The sectors employing the greatest proportion of part-time workers are Hotel & Restaurants (47%), Health & Social Work (39%), Education (37%) and Retail (33%). However, given that the Hotel & Restaurant is a relatively small sector, the largest employers of part-time working are Education, followed by Retail and Health & Social Work. These could therefore be viewed as key sectors for SoT working, although most part-time workers in these sectors are employed on permanent, rather than temporary or casual basis.

The Hotel & Restaurant and Agricultural sectors are heavier users of temporary or casual workers, but they are much smaller sectors of employment overall. Interestingly, Construction is a low user of part-time workers, although anecdotally a heavy user of temporary or casual workers.
### Annual Business Inquiry Data – Total number of jobs, average hours worked and average hourly pay for full-time and part-time employees, by Industry sector

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Number of employee jobs (000s)</th>
<th>Median Hours Worked</th>
<th>Median Hourly Pay (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Full Time Part Time % Part Time</td>
<td>All Full Time Part Time</td>
<td>All Full Time Part Time</td>
</tr>
<tr>
<td>All Employees</td>
<td>21,917 16,430 5,487 25%</td>
<td>37.0 37.5 20.0</td>
<td>9.21 10.41 6.24</td>
</tr>
<tr>
<td>Agriculture, Hunting and Forestry</td>
<td>129 102 26 20%</td>
<td>40.0 40.8 20.0</td>
<td>6.38 6.50 5.50</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>42 42 0%</td>
<td>40.0 40.0 19.4</td>
<td>10.42 10.51 7.95</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3,074 2,868 206 7%</td>
<td>39.0 39.0 22.0</td>
<td>9.81 10.04 6.66</td>
</tr>
<tr>
<td>Electricity, Gas and Water Supply</td>
<td>93 89 5 5%</td>
<td>37.0 37.0 22.9</td>
<td>13.09 13.27 7.95</td>
</tr>
<tr>
<td>Construction</td>
<td>815 757 58 7%</td>
<td>40.0 40.0 20.0</td>
<td>10.00 10.17 7.20</td>
</tr>
<tr>
<td>Wholesale and Retail Trade; Repair of Motor Vehicles, Motorcycles and Personal and Household Goods</td>
<td>3,210 2,153 1,057 33%</td>
<td>37.5 39.8 19.5</td>
<td>6.77 8.23 5.19</td>
</tr>
<tr>
<td>Hotels and Restaurants</td>
<td>847 453 394 47%</td>
<td>34.0 40.0 16.3</td>
<td>5.28 6.25 4.75</td>
</tr>
<tr>
<td>Transport, Storage and Communication</td>
<td>1,309 1,163 146 11%</td>
<td>39.3 40.0 24.0</td>
<td>9.68 9.89 8.07</td>
</tr>
<tr>
<td>Financial Intermediation</td>
<td>1,096 928 167 15%</td>
<td>35.0 35.0 21.0</td>
<td>12.68 13.98 8.51</td>
</tr>
<tr>
<td>Real Estate, Renting and Business Activities</td>
<td>3,101 2,407 695 22%</td>
<td>37.5 37.5 20.0</td>
<td>9.90 11.56 6.09</td>
</tr>
<tr>
<td>Public Administration and Defence; Compulsory Social Security</td>
<td>1,320 1,126 194 15%</td>
<td>37.0 37.0 20.0</td>
<td>11.11 11.64 7.79</td>
</tr>
<tr>
<td>Education</td>
<td>3,336 2,104 1,232 37%</td>
<td>32.5 36.0 18.0</td>
<td>10.59 13.10 6.78</td>
</tr>
<tr>
<td>Health and Social Work</td>
<td>2,637 1,609 1,029 39%</td>
<td>36.0 37.5 21.1</td>
<td>9.21 10.31 7.61</td>
</tr>
<tr>
<td>Other Community, Social and Personal Service Activities</td>
<td>871 607 263 30%</td>
<td>37.0 38.5 18.5</td>
<td>8.04 9.24 5.92</td>
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<tr>
<td>Private Households with Employed Persons</td>
<td>10 6</td>
<td>33.0 40.0 19.7</td>
<td>6.03 5.94 6.13</td>
</tr>
<tr>
<td>Extra-Territorial Organisations and Bodies</td>
<td></td>
<td>37.5 38.0 24.5</td>
<td>12.18 10.34</td>
</tr>
</tbody>
</table>

Source: ONS Annual Business Inquiry 2004
Companies' use of temporary workers

We have not been able to identify data on numbers of companies that currently use temporary workers. However, a 1995 survey by the Institute for Employment Studies (IES) suggested that 50% of companies employ temporary workers, but only for 1 in 10 employees on average. A 1998 study by researchers at Birkbeck University suggested that 57% of firms use temporary workers and that 9.2% of all employees are temporary. The report also shows that the trend towards using temporary workers has been growing - between 1992 and 1996 total UK numbers in temporary work rose by 30%, compared to total employment rising by 2.4% in that period. The figures from the current Labour Force Survey (used above) suggest that temporary workers now account for 11.3% of all those employed.

The Recruitment and Employment Confederation (REC) estimates that there are 1.5 million temporary workers registered with UK agencies and up to 1 million temps deployed in industry, commerce and the public services every day. In a recent REC survey, only 46% of temporary workers said that they would prefer to be working as permanent staff. Adecco, the UK's leading temp agency currently has 30,000 temporary workers on its payroll each week and has 32,000 clients.

Clearly, the use of temporary workers varies greatly by industry. A recent survey of small business owners by Barclays found that temp workers are most prevalent in the agriculture, hotel and catering industries, with 58% of respondents from these sectors claiming they bring them in. Half of construction firms reported using temporary staff, along with 45% of business services companies.

In a recent Accenture survey of major retailers, most retailers reported that seasonal workers represent less than 20% of their workforce.

Current level of unfilled vacancies

In theory, SoT workers could be used to temporarily fill vacancies for which a permanent employee has yet to be found.

The total stock of “live” unfilled Jobcentre Plus vacancies was around 550,000 as of May 2005, with around 240,000 new vacancy notifications in that month (with an average of 288,000 notifications per month over the previous 12 months). Of course, not all new vacancies are notified to Jobcentre Plus. DWP estimates that Jobcentre Plus vacancies represent around one third of all vacancies nationwide. Hence, we can estimate that there is currently a nationwide stock of 1.6 million unfilled vacancies and around 860,000 new vacancies every month.

Interestingly, from 7 April 2005, both notifications are only counted in the statistics if the vacancy concerned is for 8 hours or more in a 7-day period. Previously vacancies of between 3 and 8 hours were included. The change is estimated to have reduced the recorded inflow of notified vacancies by some 4,000 to 5,000 per month since April. Hence some 4,000 or 5,000 Jobcentre Plus new vacancies per month are for fewer than 8 hours per week, which if we assume only 1/3 are notified to Jobcentre Plus, there could be between 12,000 and 15,000 new vacancies per month that are for fewer than 8 hours per week – ideal candidates for SoT working.

Days lost due to sickness absence
It is believed that SoT working could be used as a way to plug labour gaps left by sickness absence. Hence, it is useful to understand the approximate number of days lost to sickness. However, estimates vary by large orders of magnitude:

A 2004 survey by the ONS found that in the three months from March to May 2004 some 1.7 million scheduled working days were lost to sickness absence among employees. If we assume no seasonal variation, this could multiply up to around 6.8 million scheduled working days lost annually.

However, the CBI’s annual survey of sickness absence reports that the number of working days lost was 166 million in 2002 – down 5.7 per cent from 176 million days in 2001. The CBI suggests that sickness absences are higher among larger companies than small companies, and higher in certain sectors (e.g. manufacturing and public sector) than others. Whilst the majority of sickness absence is short term, up to 30% of days lost are due to long term sickness absences of >20 days but this involves only about 1 in 20 of all absence cases.

Other absences that could be considered include holidays, maternity/paternity leave and other scheduled leaves of absence (e.g. sabbaticals). A proportion of these absences could potentially be temporarily filled with SoT working. However, there is no data available on the actual levels of temporary absences nationally.

Conclusion

Although it is not possible to quantify likely demand for SoT working, it would appear that there is significant potential, due to high and rising levels of part-time and/or temporary employment (especially in sectors such as Retail, Education, Health & Social Work, Agriculture, Hotel & Catering). SoT offers a way of filling (temporarily or permanently) current high volumes of unfilled vacancies and as cover for planned and unplanned absences. Again, we would strongly recommend further (primary) research to build a more comprehensive picture of the potential demand for SoT working.