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# **The Growth of Temporary Services Work**

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## Abstract

Temporary services employment has expanded rapidly and now accounts for a sizable fraction of aggregate employment. The industry's workers are no longer overwhelmingly female or limited to clerical occupations. Temporary work is associated with variable weekly schedules and with part-year participation, but not with voluntarily part-time work. On average, temporary workers have less labor market security than permanent workers, being prone to both more unemployment and more underemployment. Relatively few of them, however, stay in temporary positions for as much as a year and the majority move on to permanent employment within that time period. Temporary workers' wages average over 20% less than permanent workers, but at least two-thirds of this gap is explained by worker and other job characteristics. We discuss explanations for temporary services employment growth that involve an increased client firm demand for flexibility, including the flexibility to screen workers before offering them permanent positions, an increased ability of temporary workers to perform valuable tasks, an increased supply of workers willing to accept temporary positions, and an increased use of temporaries to implement two-tier compensation structures. We emphasize that temporary workers are quite diverse and, in particular, that occupation is an important determinant of the relative quality of temporary versus permanent jobs and possibly the reasons for temporary services employment growth.

For over 20 years the temporary help services industry, which provides client firms with workers on an as-needed basis, has expanded at a phenomenal rate. Indeed, since 1972, the industry's employment has grown at an annual rate of over 11% while its share of total U.S. employment has risen from under 0.3% in 1972 to more than 1.8% in 1995. The industry is even starting to play a significant role in aggregate employment developments, accounting for approximately 12% of net employment growth since the last recession. This rapid growth naturally has attracted substantial attention to the industry. For instance, it was a headline event when the largest temporary services firm, Manpower Inc., became the nation's leading issuer of W2 forms in 1993.

The temporary services industry also commands attention because many view its growth with some alarm. Such analysts point to data suggesting that temporary workers earn low wages and receive practically no benefits. They further argue that such workers have negligible job security, receive little training, and, as a result, may become locked into a labor market underclass. The industry and others challenge such claims and point to efficiencies created by temporary employment relationships.

In this article, we examine the growth of the temporary services industry in greater detail and discuss what is known about the quality of temporary services jobs and how they fit into workers' labor market careers. We also discuss some of the forces that may be driving the growth of temporary services work.

## **I. Employment Growth**

Because of shifting industry classifications, tracking the growth of the temporary services industry with official Bureau of Labor Statistics (BLS) data is not entirely straight forward. Currently, for instance, the employment totals for *help supply services* (SIC code 7363) reported in the BLS's monthly Current Employment Survey (CES) include firms in both temporary services and employee leasing. The latter group of establishments assume the payroll of an existing work force, thereby becoming the legal employer, but have no role in worker recruitment or screening. Thus, the service they perform is quite distinct from that of temporary services firms. Fortunately,

an industry trade group, the National Association of Temporary and Staffing Services (NATSS) has provided a consistent measure of temporary services employment on at least an annual frequency since 1972. These data are derived from a combination of CES data and data collected by survey research firms using similar methodology.

The growth of temporary services employment, as measured by the NATSS time series, is shown in Figure 1. For comparison, the figure also shows growth in aggregate non-farm employment and employment in the industry grouping known as *personnel supply services* (SIC 736), for which CES data is available on a consistent basis since 1972. In addition to temporary services and employee leasing, the personnel supply services industry includes employment agencies, whose workers facilitate the creation of permanent employment relationships between client workers and firms.<sup>1</sup> As the graph makes clear, the general trend in the NATSS and personnel supply services are quite similar and temporary services employment is a large fraction of the personnel supply services total.

As noted in Table 1, temporary services employment grew from only 165,000 in 1972 to well over two million by 1995, which amounts to a prodigious 11.8% annualized growth rate. By way of comparison, aggregate non-farm employment grew at only a 2.0% percent annual rate during the same period. Of course, the industry was starting from a small base, so its large percentage increases were not always important at the aggregate level. In recent years, however, temporary services has begun to account for a significant fraction of all employment growth. For instance, Table 1 shows that the industry has gained over a million workers since the end of the 1990-91 recession, which is 12.1% of aggregate employment growth during that period. During the first

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1. In the next section we discuss the characteristics of temporary workers using data from the March demographic files and the outgoing rotation groups of the BLS's Current Population Survey (CPS). This latter data source, which is derived from a survey of individual workers, can also be used to estimate employment in the personnel supply industry. Such estimates are substantially lower than those shown in Figure 1. The most likely reason for this discrepancy is that some CPS respondents report the industry of the client firm where they are working rather than the temporary services firm that is their actual employer. Workers holding second jobs in the temporary services industry, which would be counted in the CES and NATSS data but not in the CPS based totals, may also play a role. See Segal and Sullivan (1995).

two years after the recession, when aggregate employment growth was quite sluggish, the industry's contribution was even more important, amounting to over a fifth of total employment growth.

One way to put the recent growth of the temporary services industry into context is to note that in each of the last several years, the *addition* to its work force has approximated the *total* work force of one of the nations' largest employers. For instance, the temporary service industry's employment growth from 1992 to 1993 was 287,000 – not much less than the current employment of an AT&T, its growth from 1993 to 1994 was 335,000 – about a Ford, and its growth from 1994 to 1995 was 190,000 – only a little less than a General Electric. The temporary services industry has clearly become an important part of the labor market.

We should note, however, that while the growth of the temporary services industry has been very rapid and the industry now accounts for a nontrivial fraction of employment, it is not nearly as large as is sometimes claimed. For instance, one sometimes hears claims that 25% of American workers are now temporaries or that by the end of the century, temporary workers are likely to make up half the work force.<sup>2</sup> Such confusion stems from the false identification of temporary services workers with a broader category that is sometimes referred to as *contingent* workers and from some rather rough estimates of the size of that broader category.

The term *contingent* has been used to describe a wide class of workers who share some common difficulties arising from the lack of portability of pensions and health insurance, but who are otherwise quite diverse.<sup>3</sup> In addition to temporary services workers, the term is frequently used to include part-time workers and the self-employed. These two categories are much larger than temporary services, making up 17.5% and 11.8% of the labor force, though neither is growing nearly as rapidly as temporary services.<sup>4</sup> Together these categories come to approximately one quarter of the work force,<sup>5</sup> but temporary services workers are only a small part of the total.

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2. One could easily come to both these conclusions from, for example, Lance Morrow's essay in Time magazine, "The Temping of America." (Time Magazine, March 29, 1993)

3. The term is due to Audrey Freeman (1985) who emphasized the conditionality inherent in certain forms of employment. See Polivka and Nardone (1989) for a discussion of possible definitions of contingent work.

4. See, for example, Segal (1996).

Moreover, many part-time and self employed workers are secure enough in their jobs that the term contingent, suggesting as it does a high degree of conditionality, seems inappropriate. For instance, Polivka and Nardone (1989) note that the median job tenure of part-time workers is approximately 80% of that of full-time workers and that many self-employed workers are highly committed to their occupation or business and often have a great deal of employment security. When the BLS conducted a special survey of contingent work as a supplement to the February 1995 CPS, they considered three definitions of contingent work. They estimated that the broadest category, which included all workers not expecting their current job to last, made up only about 4.9% of the labor force.<sup>6</sup> Finally, while Manpower Inc. has issued the greatest number of W2 forms in recent years, most of its workers are employed for quite short periods, so that in terms of full time equivalents, it has not yet surpassed GM as the nation's largest private employer.

## II. Demographic and Occupational Composition

The stereotypical "temp" is a woman working part-time in a clerical position. She receives lower than average wages and benefits and has less job security than most workers. As we detail below, the first part of this stereotype – the female, clerical, part-time temp – is a far from accurate depiction of this now diverse group of workers, but the second part – the temp with below average wages, benefits, and job security – largely reflects reality.

Table 2 shows how temporary worker characteristics compared to those of other workers in 1993. To create this table, we identified the hourly paid personnel supply industry workers in the outgoing rotations and March demographic files of the Current Population Survey (CPS), the BLS's monthly survey of American households.<sup>7</sup> As can be seen, women *are* predominant in temporary positions, but at slightly less than 40%, the fraction of temps that are male is not as low as one might imagine. Of course, more than half of other workers are male, so the contrast is still signifi-

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5. Even higher figures for the fraction of workers in the contingent work force are sometimes reported by those who ignore the overlap between the categories. See, for example, Belous (1989).

6. See U.S. Department of Labor (1995).

cant. Another notable difference between temps and other workers is that only about two fifths of temps are married, compared with three fifths of other workers. Their average age of 35.6 is about three years less than that of the typical worker and nearly a quarter of temps are members of racial minorities, compared with about 15% of other workers. Temporaries are somewhat less likely to be at the extremes of the educational distribution. Only 10% did not finish high school and only 20% are college graduates, compared to fractions of 13% and 25% among other workers.

Table 2 also shows that temporary workers are no more likely than other workers to work part time because they want to; the fraction voluntarily part-time is 14% for both temporaries and other workers. This should make it clear that “temporary” and “part-time” are quite distinct states. Temporary workers are, however, much more likely than other workers – 20% versus 5% – to work part time “for economic reasons;” that is, to work part-time because they are unable to find full-time employment. Moreover, perhaps because their hours choice is more likely to be constrained, temporaries work, on average, about four hours less per week than other workers. That temporary workers, who receive little commitment from their employers, find themselves underemployed more often than other workers is probably not surprising. Indeed, the shift of risk from firm to worker that is usually inherent in temporary services work, is at the heart of the worries some have voiced over the growth of the temporary services industry.

Temporary workers also appear to have more variable weekly schedules. Table 2 shows that the number of hours they worked in the survey week tended to deviate more from what they reported as their *usual* weekly hours. The standard deviation of the difference between current and usual weekly hours was 9.0 for temporary workers compared with 7.4 for permanent workers. This difference could arise because temps use the flexibility of their employment arrangements to meet

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7. There are two potential problems with our identification of temporary workers in the CPS. First, the CPS only reports workers' industry to three digits. As we noted above, in addition to temporary services workers, the personnel supply industry (SIC 736) contains employee leasing and employment agency workers. table 1 suggests that these latter categories make up about 12% of the personnel supply total. Second, the temporary services industry has, of course, many permanent employees who coordinate the matching of “temps” with client firms. By restricting our sample to workers who are paid hourly we eliminate many of those permanent employees of the temporary services industry, though probably not all. In Segal and Sullivan (1995) the restriction to hourly paid workers was not imposed which explains the difference between some of the figures shown below and the results of our earlier paper.



irregularly occurring non-work obligations or it could be another indication that they are accepting more risk in their employment relations. Further evidence of the latter is the fact that they spent almost 10% – 4.8 weeks – of the previous year unemployed, compared with only 1.4 weeks for other workers.

Though temporary workers are no more likely to want to work part-time, they are more likely to work part-year. In fact, they reported spending almost 20% – 9.9 weeks – of the previous year out of the labor force. In contrast, other workers spent, on average, only 2.9 weeks out of the labor force. This suggests that temporary workers have less attachment to the labor force as well as that temporary services firms may have an advantage at accommodating preferences for part-year work.

Finally, Table 2 shows that, on average, temporary workers' wages and benefit levels are significantly less attractive than those of other workers. The difference in their average wage rates, \$8.47 per hour versus \$11.69 per hour, amounts to over 28% of the average wage. Since they work fewer hours per week, the gap between their earnings and those of other workers is even larger. They are, moreover, much less likely – 57% versus 79% – to be covered by private health insurance. We will discuss the gap between temporary and permanent workers' wages and benefits in greater detail in section IV.

Most of the similarities and differences between temporary and other workers that are highlighted in Table 2 have been reasonably constant since at least 1983. This is not true, however, of the fraction of temporaries that are male. Rather, Table 3 shows that the stereotype of the female temp was much nearer the truth as recently as 1988 when the fraction male was less than a quarter. The table also shows that the increasing presence of men is not limited to students or retirees. The portion of the help supply services labor force that is made up of prime-age males increased from 15% to 24% between 1988 and 1993. This rather rapid increase in the role of men is at least partially the result of a recent expansion of the role of temporary workers in traditionally male dominated blue-collar occupations. As Table 3 shows, over the period 1983-1993, the fraction of temps working in blue-collar occupations grew from 13% to 29% while the fraction doing traditional

pink-collar jobs fell from 46% to 39%.<sup>8</sup> The fraction of temps in white-collar jobs has been reasonably constant at around 16%.

The decline in the share of temp workers in pink-collar occupations that is shown in Table 3 is not due to a decline in the number of pink-collar temps. Indeed, that number continues to grow quite steadily. It is simply that the growth in the number of blue-collar temps has been more rapid. This illustrates what we believe to be a general point: While rapid growth has been a constant for the temporary services industry, the sources of that growth have changed considerably over time. Expansion into new fields and occupations has been an important element of the temporary services industry's growth.

Such expansion has made obsolete the image of temps as only being female clerical workers. As we saw, however, they are still likely to have lower wages, benefits, and job security than most workers. Finally, the fact that temporary workers also spent more time out of the labor force in the year before they were surveyed suggests a looser attachment to the labor force.

### **III. Labor Market Attachment and Industrial Mobility**

The suggestion of a looser attachment to the labor market is confirmed by observing the labor market transitions temps tend to make. The pattern of such transitions also adds to the evidence of temporary worker insecurity that we noted in the previous section. Transitions data do suggest, however, that working as a temporary is itself usually temporary.

Table 4 shows the fractions of temporary and other workers who are out of the labor force, unemployed, and employed one year after they were first surveyed in the outgoing rotation groups of

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8. We defined blue-collar occupations to be those in farming, forestry, and fishing (SOC 473-499); precision production, craft, and repair (SOC 503-699); machine operators, assemblers, and inspectors (SOC 703-799); transportation and material moving (SOC 803-859); and handlers, equipment cleaners, helpers and laborers (SOC 863-889). We took pink-collar occupations to be those in administrative support, including clerical (SOC 303-389) and white-collar occupations to be those in the categories of executive, administrative, and managerial (SOC 003-037); and professional specialty (SOC 043-199). The residual category, not shown in the tables, is composed primarily of sales and service workers.

the CPS.<sup>9</sup> For those that are employed, Table 4 also shows how many are employed as temps and how many are in permanent positions.

It is clear from Table 4 that temps are significantly less attached to the labor market than other workers. In fact, temps are more than twice as likely (14.0% versus 6.7%) as workers who were employed in permanent positions to be out of the labor force one year later. This finding is consistent with the view that temp workers are frequently secondary wage earners who occasionally take temporary jobs to supplement their families' incomes. As we already noted, only about 40% of temps are married, so secondary wage earners are clearly not a majority of temporary workers.

One consequence of looser attachment to the labor market is a lessened incentive to invest in human capital. Faced with a choice between a job with low initial wages but significant potential for training and wage growth and another job with higher initial wages but less growth potential, an individual who is more likely to leave the labor force in the future will be less likely to prefer the position providing more human capital investment. Such a failure to invest in human capital will tend to lower the future wages of those temporary workers who do remain in the labor market. Similarly, firms have less incentive to invest in training workers who are more likely to leave the labor force, which may further lower the future earnings of temporary workers.

A second finding from Table 4 is that temps are much more likely (6.5% versus 2.6%) than other workers to be unemployed one year later. Like the greater chance of being underemployed that we noted earlier, the higher unemployment rates experienced by temporary workers are likely a consequence of the greater flexibility they provide to employers. Those who do not receive long-term commitments from employers are more likely than other workers to find themselves without any demand for their services. Increased vulnerability to unemployment and underemployment is, of

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9. Workers typically appear in the CPS outgoing rotation files two times, one year apart. Where possible, we have matched these responses to examine workers' transitions. Note that the CPS data do not provide explicit identifiers to match individuals within the household. We have, however, followed the fairly standard procedure of using individual level demographic information (age, race, sex, and educational attainment) in conjunction with the household identifier to match individuals across interviews. See Welch 1993. Approximately 75% of the records are matched across years. However, the rate is lower in 1985 and 1986 because the 1985 survey tested new population weights and area identifiers.

course, a highly negative aspect of temporary work arrangements both for the workers who lose income and for society which loses those workers' services and may need to provide them with unemployment insurance benefits.<sup>10</sup>

Since temporary workers are more likely to be both out of the labor force and unemployed one year later, it follows that they must be less likely to be employed, a fact also evident from Table 4. More importantly, Table 4 shows that more than half (56.7%) of those working as temps have permanent jobs one year later. The fact that working as a temp is itself usually a temporary situation lessens the likelihood that such workers could make up a permanent "underclass" within the labor force. Of course, it is possible that the somewhat less than one quarter of temp workers who remain temps one year later could remain temps indefinitely, but the size of any permanent underclass is then limited to a rather small fraction of the labor force.

Table 4 also shows labor force transition rates separately for the three major occupational categories discussed in the previous section. For each group, temp workers are more likely to be out of the labor force and to be unemployed, but these rates and the contrast with permanent workers vary considerably by occupational group. On the one hand, the contrast between unemployment rates is especially pronounced among blue-collar workers with 13.5% of blue-collar temps being unemployed one year later. On the other hand, white-collar temps, though more subject to unemployment and less attached to the labor market than other white-collar workers, are not that much different in these respects than the average permanent worker. Table 4 also shows that the fraction of temps who go on to permanent jobs is quite constant across occupational groups.

One can also ask what workers were doing the year *before* they reported they were working as temps. Such tabulations generally reinforce the conclusions drawn from Table 4 in that temporary workers were more likely to have been out of the labor force and unemployed one year earlier. Similarly, relatively few of them were working as temps one year earlier.

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10. Under current law, temporary workers' employment spells are often too short to qualify them for benefits. Proposals to widen eligibility for benefits to such workers, however, have been increasingly discussed.

To summarize, temps are more likely than other workers to be loosely attached to the labor market and they have less labor market security, being more prone to spells of unemployment. More than half of temporary workers do, however, find their way into permanent employment positions within a year. Furthermore, all temporaries are not alike. Blue-collar temps appear to have particularly little labor market security, while white-collar temps are more like the average worker. Pink-collar temps fall somewhere in between.

#### **IV. Wage and Benefit Comparisons**

Given that temporary services workers face greater risks of unemployment and underemployment, one might expect them to be compensated for these risks with hourly wage rates that are higher than for similar workers with permanent positions. The common perception, however, is the opposite, that temps earn lower wages. Indeed, one of the most frequently mentioned concerns about the growth of temporary services employment is the lower than average wages earned by the industry's workers. Many point to the BLS's Current Employment Survey of establishments which reports that the gap for average hourly earnings of production and nonsupervisory workers is over 20% (\$9.15 versus \$11.75 in June 1996). An even larger gap was reported in Table 2 based on data from the outgoing rotations of the CPS.

Such aggregate figures, however, do not take into account differences between temporary and other workers in factors such as age and sex that are known to be related to wages. We show in this section that such factors, combined with other characteristics of temporary jobs, explain a good deal of the gap between temporary and permanent worker wages. Aggregate figures also miss what is important variation in the temp/perm wage gap in different occupational categories.

Table 5 shows 1993 average hourly wage rates for temporary workers for all occupations together and for each of the major occupational groupings discussed previously. Also shown is an estimate based on 1983-93 outgoing-rotations data of the gap between temporary and permanent wages as a percentage of the latter. As the table makes clear, the wage gap varies substantially by occupation. Over all, it is 21.8%, but for blue-collar workers it is nearly 30% while for white-collar

workers it is less than 15%. The gap for pink-collar workers is between these extremes and is close to the overall gap.

The third row of Table 5 shows the gap between temporary and permanent worker wages after adjusting for differences in workers' age, race, sex, education, and geographic location. These are obtained by estimating ordinary least squares regression models for the log of the wage rate.<sup>11</sup> As can be seen, controlling for these worker characteristics substantially reduces the estimated gap between temporary and permanent wage rates. The overall gap falls to 13.8%, with estimates for occupational groups ranging from 3% for white-collar workers to over 20% for blue-collar workers. Thus a good deal of the temporary/permanent wage gap can be explained by standard worker characteristics known to be related to wages. Except, in the case of white-collar workers, however, a substantial gap remains.

The fourth row of Table 5 goes further and controls for union status, part-time status, and one-digit occupation in addition to the worker characteristics allowed for in the previous row. Adjusting for these characteristics of workers' jobs lowers the estimated gaps still further. Overall, the gap is estimated to be 7.7%. Thus observed worker and job characteristics explain about two thirds of the difference between permanent and temporary worker wage rates, but not all of it. Results continue to vary substantially by occupational group. In particular, after adjusting for worker and job characteristics, white-collar temps appear to be paid about 2% *more* than white collar permanent jobs. The penalty for temporary work in the blue-collar occupations, however, is still over 15% and the gap for pink collar jobs is over 10%.

Because the outgoing rotation data contain two observations for most people, collected one year apart, we can also estimate a regression model with an individual fixed effect to control for unobserved heterogeneity. In addition to the job characteristics allowed for in the previous row, such estimates, which exploit the correlation between *changes* in temp/perm status and *changes* in earnings, control for any fixed worker-specific characteristics that may influence earnings. For

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11. The entries in Table 5 are coefficients on a dummy variable for being a temporary worker converted to percentage terms. The standard errors of the estimates shown in Table 5 are generally quite small – the largest being less than 2%.

instance, they control for any differences in the *quality* of workers' education and the number of years of labor market *experience*. The level of the latter may differ between temporary and permanent workers even after controlling for age and education because we have found that temporary workers spend more time out of the labor force.

Estimated temp/perm wage gaps derived from such a fixed-effect model are shown in the last row of Table 5. Allowing for unobserved heterogeneity reduces the overall estimate of the temp/perm wage gap to only 3.1%. Moreover, none of the occupation-specific wage gaps is as much as 6%. These results suggest that a large part of the difference between temporary and permanent worker wages is due to unmeasured permanent differences in earnings-related characteristics. An alternative possibility is that measurement error, whose importance is magnified in fixed-effect specifications, biases the estimates shown in the last row of Table 5 towards zero. Accordingly, we view the estimated gaps in the last two rows of Table 5 as providing upper and lower bounds on the true temp/perm wage gap.

We saw in section II that in addition to receiving lower wages, temporary workers are much less likely to have private health insurance coverage. The odds ratios shown in Table 6, which are based on data from the 1989 to 1993 March CPS annual demographic files, show that this is true for each of the three occupational groupings we have considered. The entries shown in the second row of the table are the ratios of the odds of a temporary worker having private health insurance coverage to the odds of a permanent worker having such coverage.<sup>12</sup> Overall, the odds of a temp worker having private health insurance are only about a third of the odds that a permanent worker is covered. These ratios range from only 16% for blue-collar workers to a still very low 56% for white-collar workers. The third and fourth rows of Table 6 show how the odd ratios change when we use a logistic regression model to adjust for worker and job characteristics. Except perhaps for white-collar workers, these controls make relatively little difference. Thus, temporary status does appear to lower workers' access to private health insurance in an important way.

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12. Recall that if the probability of an event is  $p$  then the odds of that even happening are  $p / (1 - p)$

On average, we have seen that temporary workers earn lower wages and receive fewer benefits than other workers. Thus, one might be tempted to conclude that they must always be less costly to employ than permanent workers. Of course, the story can't be that simple. If temporary workers were always cheaper to employ, firms would only want to hire temporary workers. Yet, firms still hire mainly permanent workers. In the next section we briefly discuss some of the advantages and limitations firms face in using temporaries. Here, we note only the most obvious counter weight to the lower wage and benefits paid to temporary workers – the temporary service agency's markup.

In 1995 client firms paid, on average, about 40% more for temporary workers' time than those workers received in wages.<sup>13</sup> Of course, this 40% figure is not a pure profit margin. It has to cover the cost of any fringe benefits the temporary service pays to its workers as well as the cost of social security payments, workers compensation insurance, and other social insurance programs.<sup>14</sup> The temporary services agency must also recover its overhead costs and its costs of recruiting and, perhaps, training workers. It also has to recover the costs of marketing its services to potential client firms. When client firms hire temporary workers, they do not magically eliminate entire classes of labor costs. They merely shift those costs to other firms which must then be compensated for their work.

Industry sources report that the compensation paid to the temporary services firm – the gross markup over wages paid – varies significantly according to the nature of the workers provided and the identity of the client firm. While the precise prices negotiated with client firms are highly guarded trade secrets, it is agreed that providing specialized labor commands a bigger markup than providing workers for routine tasks. In terms of the occupational breakdowns discussed above, temporary services firms typically charge the highest markups for white-collar temps and the lowest markups for blue-collar temps. Such a pattern of markups reflects costs; it is more difficult to recruit and place workers with the kind of specialized skills that white-collar temps often

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13. See NATSS (1996b).

14. According to the National Income and Product Accounts, the cost of compensation paid in the form of contributions for social insurance amounts to approximately 11% of wage and salary accruals. Other labor income which includes fringe benefits – and which temporary workers are likely to get less of – average about 12% of wages and salaries. See U.S. Department of Commerce (1996).



possess. Temporary services firms are also reported to charge lower gross markups to bigger firms. In part this may reflect cost efficiencies that come from dealing with fewer client firms. It may also reflect the greater bargaining power of large firms. Whether the markup charged by temporary services agencies outweighs the savings in terms of lower wages and benefits to the workers, thus, will depend on the details of each firm's situation.

## V. Driving Forces

Why has the temporary services industry grown so fast? In this section we discuss a number of possible explanations. Unfortunately, we don't believe there is sufficient evidence to determine conclusively which factors have been most important in driving the growth of temporary services. Thus this section is rather speculative and largely serves to identify the need for further research. Even with more research, however, it is not clear that a single explanation will emerge for the growth of temporary services. Indeed, it seems likely to us that there are a number of forces driving the industry's growth and that different factors may be responsible for its growth in different sectors and at different times.

The temporary services industry serves the demand of client firms for temporary workers and is itself dependent upon the supply of workers willing to accept such positions. We begin our discussion of the industry's growth with a list of factors that might have increased client firm demand, then go on to discuss whether temporary worker supply may have increased. Next, we consider the possibility that the temporary services industry may have gradually become more efficient at matching client firms to workers. Finally, we consider the possibility that the use of temporary services workers has grown because client firms increasingly find it convenient to use temporary workers to create two-tier compensation structures. This final explanation has little to do with flexibility or other unique attributes of temporary workers discussed under the heading of client firm demand. Instead, it views their use as merely a convenient way around what would otherwise be regulatory or morale problems.

*Client firm demand.*

In addition to any hourly cost differential, the key factors in firms' decisions about whether to use temporary workers would seem to be the value of the flexibility that they provide and temporary workers' ability to do the work. The temporary service industry's own accounts of their growth tend to emphasize the increasing value of flexibility to client firms. We suspect that an increase in temporary workers' ability to perform certain tasks may have also played a role.

A representative of the temporary services industry began a list of factors explaining the continuing growth of his industry with the statement that "business organizations, in order to compete in an interconnected global economy, need to be flexible in all of their company operations, and temporary help and staffing services offer that flexibility."<sup>15</sup> Clearly, using temporary workers does offer client firms greater flexibility. If demand for their products picks up, they can bring in more workers with little advance notice. Then, if demand falls they can simply send those workers back to their temporary services agency without significant legal or administrative effort. Similarly, if regular workers are absent for short periods, the use of temporaries can avoid major disruptions to work flow.

What is less clear is whether firms really value flexibility *more* than in the past. This is obviously a hard question to answer. When business executives are asked whether flexibility has recently become more important in their industry, they invariably answer "yes."<sup>16</sup> Combine "flexibility" with another buzz word like "globalization," as in the above quotation, and one is almost certain to get an affirmative response. Flexibility has such good connotations that executives may simply be responding the way they think is expected. In addition to surveys of business people, two other arguments for the importance of increased flexibility in the growing use of temporary workers have been advanced. First, firms are becoming more flexible in a number of areas beyond the use of temporary workers, so the use of temporary workers may be part of a broader desire for flexi-

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15. Samuel Sacco in NATSS (1995a).

16. See, for example, Axel (1995).

bility. Second, some view the business environment as having become more volatile and thus view flexibility as more valuable. We consider these arguments in turn.

In addition to the increased use of temporary workers, there are a number of ways that firms are becoming more flexible. For instance, many manufacturing firms have attempted to implement just-in-time inventory control policies that give them a kind of flexibility with respect to materials inputs quite analogous to that provided by temporary services for labor inputs.<sup>17</sup> Similarly, Census Bureau studies have detected increased use of advanced, computer controlled tools that can be quickly switched from one use to another.<sup>18</sup> Thus, there is some evidence of a general trend towards greater flexibility in U.S. industry.

Flexibility, of course, is not a free good. For instance, machines that can be quickly switched to new uses are more expensive to produce than ones that can't, and firms that demand that suppliers deliver inputs on short notice must compensate those suppliers for the extra difficulty. Similarly, the flexibility derived from using temporary services workers must come at some cost, perhaps because temporary workers or temporary services firms must be paid compensating differentials for the greater risk they bear.

It is possible that the trend towards increasing flexibility in these other aspects of firm behavior is driven not so much by firms deriving greater benefits from flexibility, but by a lowered cost of flexibility. Technological breakthroughs that have lowered the costs of flexibility are definitely behind the increasing use of flexible, computer-controlled tools and have also played a large role in the growth of just-in-time inventory policies. As we discuss below, the cost of the flexibility derived from using temporary workers may also have fallen as the market for those services has expanded.

Given a constant schedule of adjustment costs, flexibility obviously has greater value when the economic environment is more volatile. If circumstances are constantly changing, then being locked into a certain employment level will be more costly. The question, of course, is whether the

17. See, for example, Helper (1991), Klier (1993), and Allen (1995).

18. See Bureau of the Census (1994) and Klier (1996).

business environment is really becoming significantly more volatile. When this proposition was first advanced in the mid to late 1980's it was probably quite plausible.<sup>19</sup> The recession of the early 1980's was quite deep and the recovery from it quite robust. Thus macroeconomic fluctuations may have seemed to be increasingly volatile. More recently, however, aggregate fluctuations have been less severe. The growth in temporary services employment has not, however, declined. This suggests that increased aggregate economic volatility may not have been overly important in driving growth in temporary services. Of course, it is possible that volatility may be higher at the microeconomic level or that the experience of the 1980's continues to shape managers thinking about the value of flexibility, but the evidence supporting such developments is limited.<sup>20</sup> Thus we regard claims that a general, increased desire for flexibility has driven growth of temporary services as being plausible, but unsupported by any strong evidence.

One particular kind of flexibility that client firms derive from using temporary workers does seem likely to have been important in the recent growth of temporary services. This is the flexibility that comes from being able to screen potential permanent employees while they function as temporaries. Many managers claim that it has become more difficult in recent years to dismiss poor performers. This may reflect new legislation as well as changes in judicial interpretation that have partially eroded the doctrine of employment-at-will.<sup>21</sup> Similarly, Equal Employment Opportunity legislation limits the ability of firms to dismiss workers in certain protected classes. Even when legal obstacles are not a concern, frequent termination of regular employees may have adverse effects on the morale of those who remain employed. Thus avoiding the need to terminate regular, permanent employees is an important managerial concern that may have become more important recently. Moreover, one traditional method of screening workers – checking their references – may have recently become less effective as liability concerns have begun to make previous employers reluctant to offer negative appraisals of former workers.

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19. See, for example, Abraham (1990).

20. Department of Labor (1995) reviews recent studies on the trend in employment stability as measured by job tenure, retention rates, job turnover, and part-year work. It finds that the level of labor market stability has been relatively constant, but notes that there have been more notable changes for some groups of workers.

21. See, for example, Krueger (1991) and Dertouzos and Karoly (1992).

One way managers still can reduce their need to terminate poorly-performing permanent employees is to hire and carefully monitor temporary workers and then offer permanent positions only to those who perform well. Anecdotal reports suggest that this strategy recently has become quite common, especially in clerical and technical occupations. The frequent use of such a screening strategy is also consistent with the finding discussed in section III that the majority of temporary workers are employed in permanent positions one year later. Of course, our data did not allow us to determine whether large numbers of temporary services workers found employment in the same establishments where they formerly were temporaries. According to surveys conducted by NATSS, however, 38% temporary services workers report having been offered permanent jobs at the firms where they worked as temporaries.<sup>22</sup>

That labor market rigidities such as restrictions on dismissals can lead to the use of temporary workers is consistent with evidence from the European Community.<sup>23</sup> In countries such as France, where strong restrictions are placed on dismissals of regular workers, the use of temporary services tends to be greater. In countries such as Spain and Portugal, where strong restrictions on dismissals are combined with severe limits on the use of temporary services, the use of directly hired, fixed-term contract workers has exploded.<sup>24</sup>

U.S. labor markets remain, of course, much more flexible than those in Europe. Some trend toward rigidity is noticeable even here, however. In addition to the erosion of the employment-at-will doctrine and Equal Employment Opportunity law, recent legislation has mandated advanced notice of layoffs and mandatory leaves in cases of family and medical emergencies. It is possible that an unintended consequence of this trend towards greater rigidity is firms' greater use of temporary workers. Except in the case of the difficulty of terminating poor performers, however, few managers cite labor market rigidities as a reason for using temporaries.<sup>25</sup>

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22. See NATSS (1994).

23. See Grubb and Wells (1993).

24. See Bentolila and Dolado (1994) and Blanchard, et. al.(1995).

25. See Axel (1995).

As we noted above, in addition to flexibility, the ability of temporary services workers to perform necessary tasks is obviously a key determinant of whether they will be employed by client firms. In particular, tasks that require substantial investment in firm-specific skills are usually not well-suited to the use of temporary workers. Rather, recouping such an investment requires a long-term employment relationship. In at least some areas, however, the importance of firm-specific skills may be declining. An obvious force in this direction is the standardization brought on by mass-produced computer software. Temporary services secretaries who are proficient with, say Word Perfect word processing software, can, with very little additional training, work productively at a client firm that uses that software. Firm-specific details, such as how letters and memos are to be laid out, where addresses go, etc., can be added later or embedded in software templates created by the client firm in a way that requires little firm-specific expertise from the worker.

Our impression is that, in technical fields especially, standardization is making firm-specific knowledge less important. For instance, the trend towards open standards such as those that allow different kinds of hardware and software to work together, necessarily leads firms to implement their systems in ways that are more similar to each other and to avoid solutions that are highly idiosyncratic. Thus firm-specific knowledge becomes less important and the use of temporary workers becomes more attractive, a development that may be important to the industry's growth in at least the technical fields.

At the same time that standardization of software has been decreasing the significance of firm-specific skills, the advance of technology has been making it more difficult for individuals to remain competent in all aspects of technical fields. Rather, in order to stay on the frontiers of their fields, technical workers are increasingly forced to specialize. As skills become more specialized, smaller firms may not have enough work to keep those with the most up-to-date skills busy full time. In such cases, temporary services agencies can employ one specialist to provide technical services to several firms, in much the same way as consulting firms do.<sup>26</sup>

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26. Abraham and Taylor (1996) present evidence that the need for specialized services is a factor promoting the use of outside contractors.

### *Temporary worker supply.*

Industry representatives and researchers have both suggested that part of the growth of temporary services employment is due to an increased supply of workers willing to work as temporaries<sup>27</sup>. In particular, female labor force participation has risen at the same time that male participation has fallen with the result that the fraction of the labor force that is female has increased quite substantially. These trends, coupled with our earlier observation that women are more likely than men to be temp workers, might suggest that increased female labor force participation increased the supply of temporary workers.

Moreover, the increase in women's role in the labor force has been accompanied by an increased prevalence of part-time work which is consistent with the view that working women and/or their working husbands require additional flexibility in the form of part-time work schedules in order to accommodate both work and non-work responsibilities such as child rearing. Thus firms that can offer workers flexibility might have an advantage in attracting this increasingly important sector of the labor force and temporary services firms seem likely to be in especially good position to offer flexibility. For instance, since they routinely build up lists of qualified workers on whose services they can draw, they may find it less disruptive to have workers occasionally decline assignments.

Several factors suggest caution, however, about accepting the hypothesis that temporary worker supply increases have been an important factor in the temporary service industry's growth. First, we have already noted that much of the growth in temporary services work came from increased male participation in temporary work. Second, while voluntary part-time work, which we found not to be associated with temporary work, has increased, part-year labor force participation,

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27. See, for example, NATSS (1996b) and Laird and Williams (undated). The latter authors argue that, though there is no time series evidence of a relationship between the long-run trends in temporary help supply employment and other variables, the short-run variation in temporary help supply employment growth is explained by both supply and demand factors. They further suggest that Golden and Applebaum's (1992) earlier results suggesting that supply factors were unimportant were flawed due to statistical misspecification. Our own view is that the available time series are too short to learn much about the reasons for the long-run growth of temporary services work from such exercises.

which is associated with temporary work, has been relatively flat. The growth in the labor force participation of women, who are more likely to work part-year, has been offset by decreases in part-year participation by both working women and, to a lesser extent, working men.<sup>28</sup> Thus flexibility, at least in the form of part-year work, may not be such an increased priority among today's workers. Finally, to the extent that the increase in women's market work was due to productivity improvements in home work technology such as washing machines, vacuum cleaners, etc., some workers may have less need for flexibility than in the past.

*Temporary services efficiency.*

Firms can and do employ workers on what they know to be a temporary basis without using a temporary services agency. They can simply recruit, screen, and train "temporary workers" themselves. Then, when the task is complete, they can terminate those workers. Indeed, Polivka (1996) suggests that a large part of the growth of temporary services is simply a shift from firms hiring their own "temporary workers" to firms relying on an outside agency to do the same thing. Such a shift would represent a less fundamental change in the way work is done than is often attributed to the growth in temporary services. Polivka (1996) estimates that such direct-hire temps made up 3.1% of employment at the time of the February 1995 supplement to the CPS, which is more than current estimates of temporary services industry employment. Thus, direct-hire temps are numerous enough that a large-scale shift from their use to temporary services workers could explain growth on the order of what has been observed for the latter. Unfortunately, we know of no earlier data on firms' use of "direct hire temporaries," so we can't say just how much of the growth of temporary services is accounted for by firms using temporary services agencies to do what they used to do themselves. It does seem plausible, however, that such a shift could account for a substantial part of the growth in temporary services employment.

Temporary services firms can be viewed as specialists in recruiting, screening, and training workers in occupations in which firm-specific skills are relatively unimportant. Such specialization

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28. Trends in part-year work are discussed using different measures in Department of Labor (1995) and Motley (1996).



may lead to greater efficiency. For instance, temporary services firms whose primary business is finding workers willing to take on temporary assignments may learn better where to advertise for such workers. Moreover, when temporary services firms recruit workers, they may be able to send those workers on several assignments, thus spreading the recruitment costs across multiple matches. In contrast, firms directly hiring temporary workers for their own use pay the full cost of recruiting those workers.

Similarly, temporary services firms that are able to assign workers to multiple clients are in a better position to recoup some of the costs of training workers in general skills than are firms that directly hire temporary workers for single assignments. Perhaps because of their ability to spread the costs over multiple assignments, many temporary services firms provide their workers with significant training.<sup>29</sup> For instance, NATSS (1994) presents results of surveys of temporary workers indicating that 29% of temps receive 20 or more hours of training from their temporary services employer. Finally, other things being equal, taking temporary assignments may be more attractive to workers when mediated by temporary services firms because when those assignments end, the temporary services firms may have other assignment for workers, while firms hiring directly will not.<sup>30</sup>

If temporary services firms have a cost advantage in the hiring and training of many kinds of workers, why is this advantage only now becoming apparent? Why weren't firms using temporary services as heavily ten or twenty years ago as they are today? One plausible answer is that the cost advantage of temporary services agencies has only emerged over time and is, in fact, partially determined by the size of the temporary services market. For instance, when temporary services firms were not widely employed by client firms, fewer workers probably thought to contact such firms when they were seeking employment which would imply higher recruitment costs. Conversely, as the industry has expanded, many more workers are likely to have seen it as a potential employer, thus lowering the industry's recruitment costs.

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29. Alternatively, workers may accept temporarily lower wages in return for training.

30. Magnum, Mayall, and Nelson (1985) discuss the advantages of temporary services firms over firms hiring temps directly.

The attractiveness of the temporary services industry to workers may have also increased because its greater scale may have decreased the risks of unemployment and underemployment associated with temporary services work. On the one hand, when few firms employ temporary service agencies, workers finishing temporary assignments are more likely to find that agencies have no additional work for them. On the other hand, when the list of client firms is long, workers are more likely to be able to move from one full-time assignment to the next without intervening periods of unemployment. A similar economy arises for temporary services agencies as they serve more client firms. Specifically, when there are relatively few client firms, it is less likely that temporary services agencies will be able to send workers to several clients, thus spreading their recruitment and training costs over a wider base. As temporary services firms have gained more clients, however, they have been able to reduce costs per placement.

If the temporary services industry's costs have been falling over time, then one might expect to see a similar decline in their gross markups. What little we know of temporary service firms' markups is consistent with such a trend. In the early 1990's temporary services revenues were approximately 50% above their payroll costs. More recently, as we noted above, revenues have exceeded payrolls by only about 40%.<sup>31</sup> Unfortunately, we have no data on markup levels in earlier periods, so the long-term trend in markups is not clear. Moreover, we have already noted that the average markup is likely to be sensitive to the mix of workers being supplied by the industry. So even the recent downward trend may reflect factors other than the industry's improved efficiency. Thus this piece of evidence, too, must be regarded as only suggestive.

#### *Two-tier compensation structures.*

Client firms may also turn to temporary services agencies not because of their flexibility or any other of their unique attributes, but because they may be a convenient way to implement two-tier compensation structures. For a number of reasons, firms may want to implement qualitatively different compensation policies for different groups of workers. For instance, certain compensation structures solve adverse selection and incentive problems by paying some workers more than their

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31. See NATSS (1996b).

market opportunities. Those compensation structures may not, however, be needed for all workers within a firm. Alternatively, different groups of workers may have different preferences over the mix of wages and benefits or some groups of workers may have greater bargaining power than others. In each of these cases, firms may want to apply quite different compensation programs to different classes of workers.

The ability to differentiate compensation structures across classes of employees is, however, limited by legal and worker morale considerations. In particular, firms may sacrifice the tax advantages of providing employee benefits and deferred compensation if they do not satisfy certain “nondiscrimination” requirements. Productivity may also suffer if morale is reduced when two groups of permanent workers are treated differently enough that they question the “fairness” of their compensation. Unions also tend to compress the variance of compensation paid to the workers they represent. Perhaps for these reasons, there is evidence that firms that tend to pay high wages for some occupations, tend to pay them for all occupations.<sup>32</sup> In such circumstances, a reasonable strategy may be for firms to use regular, permanent employees to fill positions where generous wages and benefits are needed and to use temporary services workers to fill other positions where such generosity is not needed.

Efficiency wage theory suggests a number of reasons why firms might want to pay some workers more than their market wage.<sup>33</sup> For example, if hiring and training costs are high, paying above-market wages may be profitable because it reduces turnover. Alternatively, if it is hard to assess workers’ productivity before they are hired, paying above-market wages may be profitable because it attracts workers with higher average productivity or if monitoring workers is costly, firms may decide to pay above-market wages to raise the cost to workers of being terminated upon being discovered shirking. Wages may also exceed outside opportunities when firms and workers invest in specific human capital or when firms “tilt” the wage-tenure profile to create incentives for hard work.<sup>34</sup>

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32. See, for example, Katz (1986).

33. Abraham (1990) and Abraham and Taylor (1996) discuss the role of efficiency wages in firms’ decisions to pursue market-mediated employment strategies. Yellen (1984), Katz (1986) and Weiss (1991) provide successively more detailed surveys of the efficiency wage literature.

There is, however, no reason why firms that find it efficient to pay above-market wages to some of their workers must find it efficient to pay above-market wages to all of their workers. Rather, for some jobs turnover may be very costly, worker productivity may be very hard to judge, monitoring very difficult, or firm-specific skills very important while for other jobs none of these things may be true. If this is the case, legal restrictions on differences in compensation structures may pose a problem for firms. This may be especially true when firms want to employ generalizations of the “tilted” wage-tenure profile that rely on properties of pension programs, since excluding some workers from those programs will likely violate nondiscrimination regulation. Since such regulations only apply to firms’ legal employees, hiring temporaries may be a convenient way to offer a generous deferred compensation package only to those workers for which the firm finds it efficient.<sup>35</sup>

Firms may also want to offer two-tier compensation packages when workers have different preferences over the mix of wages and benefits. Suppose for instance, that firms require the services of workers in two classes of jobs, one in which workers tend to be young and healthy and, therefore, place little value on health insurance coverage, and another in which workers tend to be middle-aged and to consider health insurance coverage essential. In such a case, the firm might want to provide health insurance only to the group that places substantial value on it. Such a policy would, however, likely jeopardize the tax advantages of providing health insurance. Using temporary services workers to perform the first class of jobs might, then, be the best alternative.

Another case in which firms may want to differentiate between classes of workers is when the incumbents of certain positions have substantial bargaining power. This could obviously be the case when some workers are unionized. Even when workers are not unionized, however, some have suggested that other groups of “insiders” may be able to disrupt the smooth functioning of the firm if they are not well compensated.<sup>36</sup> Thus, certain groups of workers may be able to nego-

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34. On specific human capital, see, for example, Mincer (1974) and Becker (1975) and on “tilted” wage-tenure profiles, see, for example, Lazear (1991).

35. Of course, complex legal issues are involved in determining whether a worker is an employee or not; simply because they receive paychecks from temporary services agencies does not mean that workers cannot be legally considered employees of the client firm. In most cases, however, they are not.

tiate attractive compensation packages for themselves. They may not, however, wish to raise the wages of the “outsiders” who don’t have the power to disrupt the firm’s operations. Thus a “two-tier” wage structure may evolve in which union members or insiders fill certain positions and earn high wages, while outsiders fill other positions and learn low wages. Using temporary services workers to fill the outsider slots may be a reasonable way to implement such an arrangement because outsiders, who by assumption lack the ability to disrupt the firm, are unlikely to need to invest in firm-specific skills.

Is there reason to think that firms have *increased* their use of the strategy of employing temporary workers to create two-tier compensation structures in the last several years? On the one hand, we see no reason to think that the adverse selection and incentive problems that may lead firms to pay some workers higher than market wages have increased and we have already argued that the importance of firm-specific skills may have *decreased* in some fields. So we can’t argue that these factors have increased the attractiveness of this reason for using temporary workers. On the other hand, the costs of providing benefits, especially the costs of health insurance, have risen substantially relative to wage costs over most of the period that temporary services employment has been increasing. Thus, if some workers do not value benefits such as health insurance, the value to the firm of not providing those benefits has risen substantially. This suggests that the increased use of the strategy of using temporary workers to create a two-tiered compensation structure may have played some role in the increased use of temporary workers.

Another reason to think that two-tier compensation strategies are a factor in the growth of at least the blue-collar segment of temporary services employment is that the beginning of the rapid growth in that sector closely matches the period when firms began to find that two-tier wage structures among their own employees were creating morale problems. Two-tier wage structures for firms’ permanent employees first began to appear in the unionized sector in the early 1980’s and by the mid 1980’s were quite common. In the late 1980’s, however, they become much rarer, a development many analysts attributed to morale problems associated with paying similar workers

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36. Lindbeck and Snower (1988) discuss the consequences of “insider” power for the employment relationship.

significantly different wages.<sup>37</sup> This suggests to us that firms that found it difficult to pay new regular employees lower wages than their established employees began to experiment with using lower-paid temporaries to fill the new openings. The relatively large gap between temporary and regular wages in the blue-collar occupations that we found in the previous section is also consistent with the notion of blue-collar temporaries filling the bottom tier of a two-tier pay structure.

As we noted at the beginning of this section, there is uncomfortably little evidence for or against the various explanations of the growth of temporary services discussed that we have just discussed. There is, moreover, another explanation for the growth that we haven't mentioned – it may just be a good idea that has taken some time to fully diffuse. Hopefully, future research will put some of these explanations on a more solid basis.

## VI. Conclusion

The temporary services industry has grown very rapidly and is now a major factor in the labor market. No longer are temps only women in clerical roles. Men – even prime-age men – are now a significant part of the temporary services work force and temporary workers perform a highly diverse set of tasks, including much blue-collar and white-collar work.

Temporary work differs from permanent work in ways that raise concerns about its growth. For instance, the flexibility that they provide to firms appears to come at the expense of their own security. With less commitment from their employers, they more often find themselves unemployed or underemployed – without a job at all or working fewer hours than they would prefer. Some portion of this extra burden of risk may, however, be due to their looser attachment to the labor market. Knowing that they may leave the labor force in the future, they and their employers may be less willing to make the kind of human capital investments that would give them more security.

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37. See Bell (1989).

Temporary workers also earn somewhat lower wages and receive fewer fringe benefits than other workers. The raw gap between temporary and permanent workers' wages is in excess of 20%, but much of this difference is explained by their demographic characteristics and other characteristics of their jobs. Depending on statistical specification, the gap adjusted for worker and other job characteristics appears to be somewhere between 3% and 8%. The gap between temporary and permanent workers' rates of private health insurance coverage is also large and very little of it is explained by other factors. Thus when temporary workers have health problems, either they will pay more, get less care, or the costs will be shifted to some other group.

It may not be cause for unadulterated celebration when a group of workers with less than average wages, benefits, and job security is growing as rapidly as is temporary services employment. Concern over that growth should not, however, be excessive. First, it appears that relatively few temps remain temps for long periods. Indeed, the majority move on to permanent jobs within a year. Thus, there is little likelihood of a significant "underclass" developing. Second, for many, the alternative to temporary services work might have been worse. Specifically, without the growth of the temporary services industry, they might have instead worked as direct-hire temps. As we discussed in the previous section, relative to the rather chaotic market in which firms hire their own temporary workers, a well-developed temporary services industry reduces the chances that workers will find themselves unemployed and increases the chances that they will get some training.

Finally, it is important to avoid inappropriate generalizations about temporary work. Even the fairly crude occupational breakdown we considered in this article revealed some important differences between groups of temporary workers in terms of the quality of jobs and the likely causes of growth. On the one hand, blue-collar temporary services jobs, whose growth may be at least partly the result of firms increasingly using them to implement two-tier compensation structures, appear to be rather poor jobs. Even after adjusting for worker and other job characteristics, the wage gap may be as much as 16%, though it could be as low as 3%. Moreover, blue-collar temps are particularly unlikely to have private health insurance and are especially likely to become unemployed. Perhaps because the jobs tend to be unattractive, however, only about 14% of blue-collar temps are still temps one year later.

On the other hand, white-collar temporary services jobs, whose growth may be partially driven by the declining importance of firm-specific skills and the need for specialization, seem to be reasonably attractive jobs. Once adjustment is made for worker characteristics, there is no appreciable wage gap for white-collar temps, though they are somewhat less likely to have private health insurance. They are also more likely to become unemployed than the average permanent worker, but the difference is relatively small. Perhaps because the jobs are reasonably attractive, white-collar temps are more likely than others to remain temps; one year later nearly 30% of them are still in temporary services.

Along most dimensions, pink-collar temporary services jobs, whose growth we suspect may be partially due to firms' desire to screen possible permanent employees, lie between blue-collar and white-collar temp jobs. The wage gap, adjusted for worker and other job characteristics is between 6% and 12%. Pink-collar temps are also quite a bit less likely to have health insurance and somewhat more likely to become unemployed. Perhaps because they lie between blue-collar and white-collar temp jobs in terms of their attractiveness, the fraction of pink-collar workers – 23% – that remain in temporary services one year later lies in between those for the other two groups. Thus, across occupational categories, the less attractive is temporary services work, the more likely it is that temporary workers will move on to something else.



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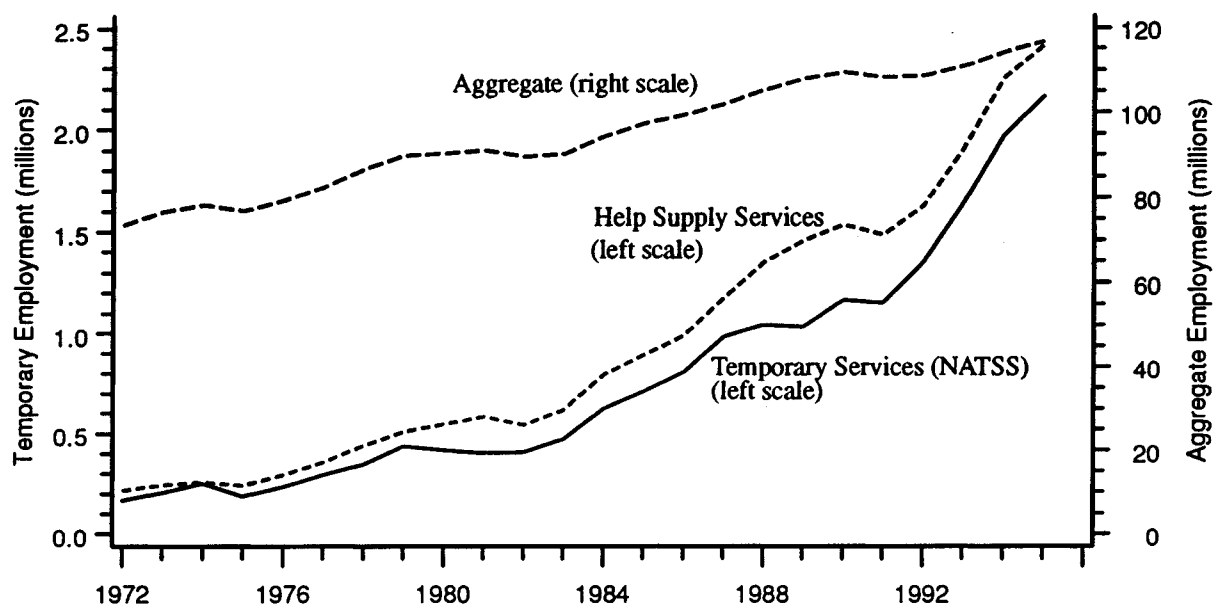
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**Figure 1: Temporary and Aggregate Employment**



**Table 1: Growth in Temporary Services Employment**

	<b>Temporary Services<sup>a</sup></b>	<b>Help Supply Services<sup>b</sup></b>	<b>Aggregate Nonfarm<sup>c</sup></b>
1972 Employment (thousands)	165	214	73,667
Percent of 1972 Employment	0.22%	0.29%	100%
1991 Employment (thousands)	1,150	1,483	108,262
1993 Employment (thousands)	1,635	1,902	110,725
1995 Employment (thousands)	2,160	2,411	116,606
Percent of 1995 Employment	1.84%	2.09%	100%
Annual employment growth rate 1972- 1995	11.8%/yr	11.1%/yr	2.0%
Employment change 1991 to 1995	1,010	928	8,344
Percent of 1991 to 1995 employment change	12.1%	10.8%	100%
Employment change 1991 to 1993	485	419	2,463
Percent of 1991 to 1993 employment change	19.7%	17.4%	100%

a. Data from National Association of Temporary and Staffing Services.

b. Average of monthly employment levels for SIC 736, Help Supply Services, from the Bureau of Labor Statistics' Current Employment Survey.

c. Current Employment Survey.

**Table 2: Characteristics of Temporary and Permanent Workers in 1993<sup>a</sup>**

	<b>Temp Workers</b>	<b>Perm Workers</b>
Average Age	35.6	37.7
Percent		
Male	39	52
White	77	85
Less than High School	10	14
High School Graduate	35	34
Started College	35	28
College Graduate or More	20	24
Married, Spouse Present	41	58
Voluntarily Part Time	14	14
Part Time for Economic Reasons	20	5
Average Usual Hours Per Week	34.6	38.5
Standard Deviation of Weekly Hours from Usual Weekly Hours	9.0	7.4
Average Number of Weeks Spent Unemployed in the Previous Year <sup>b</sup>	4.8	1.4
Average Number of Weeks Spent Out of the Labor Force in the Previous Year <sup>b</sup>	9.9	2.9
Average Hourly Wage Rate	\$8.47	\$11.70
Percent with Private Health Insurance <sup>b</sup>	57%	79%

a. Source is 1993 outgoing rotations of the Current Population Survey unless otherwise noted. See note 7 for definitions of temporary and permanent workers.

b. March Current Population Survey's pooled from 1989 to 1993.

**Table 3: Changing Characteristics of Temporary Workers<sup>a</sup>**

Year	Percent Male		Percent Prime Age (25-54) Male		Percent Pink-Collar		Percent Blue-Collar		Percent White-Collar	
	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm
1983	22	54	14	36	46	18	18	35	17	22
1988	24	53	15	37	35	17	25	34	14	24
1993	39	52	24	38	39	17	36	31	16	26

a. Source: 1983-93 outgoing rotations of the Current Population Survey. See note 8 for occupational definitions.

**Table 4: Labor Market Transition Rates<sup>a</sup>**

Initial Status	Percent with Status One Year Later				
	Out of Labor Force	Unemployed	Employed		
			Anywhere	Temp	Perm
<b>All Occupations</b>					
Employed Temp	14.0	6.5	78.5	22.8	56.7
Employed Perm	6.7	2.6	90.7	0.2	90.5
<b>Pink-Collar</b>					
Employed Temp	14.2	5.2	80.6	23.2	57.4
Employed Perm	6.9	2.0	91.1	0.3	90.8
<b>Blue-Collar</b>					
Employed Temp	14.8	13.6	71.6	14.1	57.5
Employed Perm	6.3	3.6	90.1	0.1	90.0
<b>White-Collar</b>					
Employed Temp	8.5	4.2	87.3	29.5	57.8
Employed Perm	4.2	1.4	94.4	0.2	94.2

a. Source: 1983-93 outgoing rotations of the Current Population Survey.



**Table 5: Temporary and Permanent Worker Wages<sup>a</sup>**

	<b>All Collars</b>	<b>Pink- Collar</b>	<b>Blue- Collar</b>	<b>White- Collar</b>
1993 temporary worker wage rate	\$8.47	\$7.70	\$5.96	\$14.30
Percentage difference between temporary and permanent wages	-21.8%	-17.7%	-29.4%	-13.4%
Percentage difference adjusting for				
age, race, sex, education, census division, and metropolitan area	-13.8%	-16.1%	-23.8%	-2.9%
age, race, sex, education, census division, metropolitan area, union status, part-time status, and one-digit occupation	-7.7%	-12.0%	-15.6%	2.1%
union status, part-time status, one-digit occupation, and individual fixed effect	-3.1%	-5.7%	-3.0%	-2.0% <sup>b</sup>

a. Source: 1983-93 outgoing rotations of the Current Population Survey.

b. Not statistically significantly different than 0. All other entries are statistically significantly different from 0 at the 10% significance level.

**Table 6: Temporary and Permanent Worker Private Health Insurance Coverage<sup>a</sup>**

	<b>All Collars</b>	<b>Pink- Collar</b>	<b>Blue- Collar</b>	<b>White- Collar</b>
Temporary worker coverage rate	57%	63%	28%	83%
Odds Ratio – temporary odds relative to permanent odds	0.35	0.31	0.16	0.56
Odds Ratio adjusted for				
age, race, sex, and education	0.36	0.30	0.17	0.68
age, race, sex, education, union status, part-time status	0.38	0.35	0.20	0.70

a. Source: 1989-93 Annual Demographic Files of the Current Population Survey.