

Volume 29, Issue 2

The Substitution of Worksharing and Short-Time Compensation in France: A Difference-in-differences Approach

Richard Duhautois

CEE-TEPP, University of Paris-Est- Marne-la-Vallée and CREST

Emmanuelle Walkowiak

University of Paris 12-ERUDITE and CEE

Oana Calavrezo

LEO, University of Orleans and CEE

Abstract

The short-time compensation (STC) program aims at avoiding redundancies in case of strong short-term downturns. In the literature, STC is an instrument of both job security and flexibility. This paper investigates the impact of worksharing on STC in France. The form of worksharing examined in this study is the reduction of the standard or contractual hours worked per week to 35 hours in France. We quantify the average decrease in the STC recourse with difference-in-differences estimators assessed on a balanced panel of French establishments. We highlight a substitution effect between STC and worksharing due to their internal flexibility role. As a consequence, STC seems to be less used as a flexibility device and the worksharing policy would refocus STC on its employment protection role.

Acknowledgements: This paper is a prolongation of a project financed by the Statistical Department of the French Labour Ministry (DARES). All remaining errors and shortcomings remain our own. Data availability: Final panel data is available on request from the authors and the initial databases can be requested from the institutions which produce them.

Citation: Richard Duhautois and Emmanuelle Walkowiak and Oana Calavrezo, (2009) "The Substitution of Worksharing and Short-Time Compensation in France: A Difference-in-differences Approach", *Economics Bulletin*, Vol. 29 no.2 pp. 820-833.

Submitted: Nov 05 2008. **Published:** May 04, 2009.

1. Introduction

The short-time compensation (STC) program is a device of employment protection since it aims at avoiding layoffs in the case of short-term economic downturns or exceptional circumstances (for instance, disasters). Employers applying STC can temporarily reduce their employees' activity below the legal working time or eliminate a part of their total activity. STC allows employees to maintain a contractual bond with their employer. They receive a compensation for their wage loss that is partly paid by the State. Most developed countries use some form of an STC program: the "Chômage Partiel" in France, the "Cassa Integrazione Guadagni" in Italy, the "Kurzarbeitergeld" in Germany, and the "Short-Time Compensation Program" in the United States. STC programs are relatively new and are underutilized in North America, but they have been widespread since the 1920s in Europe. Nevertheless, STC is rarely used in all countries. For example, less than 1% of establishments and 2% of their employees use STC in France (Calavrezo et al., 2008). In the 1980s, there was a similar, low STC participation, limited to less than 1% of employers in the United States (Needels et al., 1997).

Among the previously mentioned STC programs, in this paper, we focus on the French STC program between 1995 and 2005. The main feature of STC in France is that its use strongly decreased during the period under study (cf. Figure 1). What are the determinants of this important fall? Since the main purpose of STC is to help firms facing short-term economic downturns, the use of STC generally increases during economic downturns and decreases during economic upturns. Yet, since the end of the 1990s, the relation between STC and the economic situation has relaxed (see Figures 1 and 2). This coincides with the period of implementation of the worksharing policy¹. Does this mean that worksharing is a determinant of the STC decrease between 1995 and 2005? Worksharing represents a complex policy that was progressively implemented between 1996 and 2005 in France (see Askenazy (2008) for a description of worksharing in France and Kapteyn et al. (2004) for worksharing in Europe). The form of worksharing examined in this paper is the reduction of the standard or contractual hours worked per week to 35 hours in France, often referred to as "shorter hours." Within French establishments, methods and periods of worksharing implementation are very heterogeneous. The legal workweek duration was reduced to 35 hours from January 1, 2000 for firms with more than 20 employees and from January 1, 2002 for firms with 20 employees or less. There is a fundamental difference between legal workweek duration and effective workweek duration. In this paper, we focus on the reduction of the effective workweek duration. After changing the legal workweek duration to 35 hours, some establishments still kept their effective working time duration higher than the legal one, preferring to pay for overtime. Other establishments anticipated the changing of the legal workweek duration: they reduced their effective workweek duration before the reduction of standard worked hours per week. What is the motivation for an establishment to anticipate the implementation of the worksharing policy? By reducing the effective workweek duration before the worksharing implementation, they receive a financial compensation. In this paper, we focus exclusively on the anticipated reduction of workweek duration, which we henceforth refer to as worksharing.

Our work analyzes the role of worksharing in the decrease of STC use. Even if the main objective of STC is to protect employment, the economic literature also identifies a flexibility role (Burdett and Wright, 1989; Abraham and Houseman, 1994; Van Audenrode, 1994); it is important to mention that these two roles coexist. STC and worksharing are two similar internal quantitative flexibility devices, as they act on the volume of hours worked by

¹ In France, worksharing is called "35 hours."

the employees of the establishment. We have observed that firms in France use STC in two different ways: a “cyclical flexibility” use and a “structural flexibility” use. The “cyclical flexibility” use is the adjustment of working hours to the activity through STC when establishments use STC in a non-recurrent way. The “structural flexibility” use is the adjustment of working hours to the activity through repeated STC episodes. The second type of STC is contrary to French law, but it is authorized for some large firms belonging to particular industries (automobile and clothing). Worksharing provides establishments with more flexibility, and as a consequence, STC legislation was reformed in France. The aim of the reform was to diminish the use of STC, because firms could use it improperly. The idea was to refocus STC on its employment protection role. In order to estimate the effect of worksharing on STC, difference-in-differences (DD) models were tested on a balanced panel of 1,100 French establishments belonging to firms with at least 50 employees. The final panel was obtained by matching seven datasets. We highlight a decrease in STC use after the implementation of worksharing, due to the role of internal flexibility tools. Hence, globally, STC seems to be used less as a flexibility tool and more as an employment protection tool.

The rest of the paper proceeds as follows. Section 2 describes the data, and section 3 presents the econometric strategy. The evolution of STC is presented in section 4. Results are discussed in section 5, while section 6 offers some concluding remarks.

2. Data Sources

In order to assess the effect of worksharing on STC, we used an original and rich statistical dataset obtained by matching seven data sources².

When facing a short-term economic downturn, an employer can ask for a number of STC days. If the request is justifiable, the French administration authorizes the use of STC, and these authorizations are stored in a monthly STC database. This database contains information about STC authorizations obtained by French establishments between 1995 and 2005. The authorized STC imperfectly measures the compensated STC that establishments really use and for which they receive a financial compensation. Indeed, some establishments can decide not to use STC-authorized days. In the database, the number of compensated days is not available at the establishment or firm level. Thus, we measured the number of STC-authorized days. This is the upper limit of the compensated days and represents an indicator of employers’ anticipations. From these databases, we constituted an exhaustive STC panel. It covers more than 93,000 French establishments in all industries that had at least one STC authorization between 1995 and 2005. This panel provides yearly information on the number of STC-authorized days and STC employees for each establishment. We also identified establishments that had multiple STC uses between 1995 and 2005. Such a variable can capture recurrent STC use for structural downturn situations. We also recorded establishments’ industry and geographic location variables.

The “Worksharing” database contains the declarations and agreements of establishments that reduced their effective working time in order to benefit from the social security exemption. We constructed a variable that equals 1 if an establishment reduced its effective workweek duration before the worksharing implementation and 0 if an establishment did not reduce its effective workweek duration at all. Establishments that are not in the “Worksharing” database may be absent for two reasons: they did not reduce their effective workweek duration, or they reduced their workweek duration, but without asking for social security exemption. Thus, it is difficult to correctly identify establishments that did not reduce their effective workweek duration. In order to identify them, we focused on

² They are produced by the Statistical Department of the French Labor Ministry (DARES) and the French National Institute of Statistics (INSEE).

establishments belonging to firms with at least 50 employees. In contrast to small firms, firms with at least 50 employees have a low probability of reducing their effective workweek duration without asking for social security exemption.

Establishment files (UNEDIC) are annual exhaustive administrative sources relating to establishments affiliated with the unemployment insurance system. They cover the period from 1995 to 2003. These files contain information regarding the total number of employees and the percentage of women, and they allow us to identify survivor establishments over the period. We worked on a balanced panel. This condition represents our second matching criterion. This control is necessary, because it neutralizes the effects of establishments' creation/destruction associated with the economic situation, which may strongly bias our results.

Additional information about the firms to which establishments belong was obtained from four firm databases. First, we used a firm fiscal database (the "Bénéfices Réels Normaux" (BRN) file), which covers the period from 1994 to 2003. We calculated three indicators of economic health: the value-added variation rate, the profitability rate and the apparent labor productivity ratio. We also calculated two workforce structure indicators: the share of temporary workers and the share of subcontracting expenses. By comparing the size of the establishment to the size of the firm to which it belongs, we constructed a variable indicating whether the firm is a mono-establishment firm. Second, we used a database that provides firms' labor contracts (ACEMO files from 1994 to 2004). We calculated the share of fixed-term contracts in each firm. Third, firms' financial group memberships were given by the LIFI databases. Finally, the MDST databases indicate whether a firm was restructured between 1994 and 2004.

After matching these data sources and eliminating establishments with missing information and agricultural establishments, we worked on a balanced panel of approximately 1,100 French establishments.³ This final sample includes survivor establishments belonging to firms with at least 50 employees that had at least one STC authorization.

3. Econometric Model

Worksharing is not randomly distributed among French establishments. The decision to implement worksharing may be related to the internal labor force management strategy of the establishment. This raises the selection bias methodological problem. There is also an unobserved heterogeneity bias problem, since unobserved heterogeneity is likely to be correlated with STC behavior. Simple estimation methods do not produce consistent estimators. In order to control for these two biases, we implemented basic difference-in-differences (DD) models.

This method is largely used in economics for policy evaluation. As Wooldridge (2007) explained, outcomes are observed for two groups and for two time periods. One of the groups is exposed to a treatment (worksharing) in the second period, but not in the first period. The second group is not exposed to the treatment during either period. In the case in which the same units within a group are observed in each time period (panel data), the average gain in the second (control) group is subtracted from the average gain in the first (treatment) group. This removes biases in second period comparisons between the treatment and control groups that could be the result of permanent differences between those groups, as well as biases from comparisons over time in the treatment group that could be the result of trends. The equation of estimation can be written as follows:

$$STC_ind = \beta_0 + \beta_1 X + \beta_2 WS + \delta_0 I + \delta_1 WS \times I + u \quad (1)$$

³ The sample size is described more precisely in section 3.

STC_ind is the outcome of interest. Several dimensions of the STC recourse can be affected by worksharing. To quantify the evolution of the STC recourse, we used two categories of indicators: $STC_ind \in \{STC_days, STC_empl\}$. The *STC_days* variable represents the total number of STC days within a year covering employees affected by STC within the establishment (continuous variable). The *STC_emp* variable represents the total number of establishment employees affected by STC within a year (continuous variable).

Concerning the worksharing indicator, *WS* is a dummy variable that equals 1 if an establishment reduced its effective workweek duration before the worksharing implementation and 0 if an establishment did not reduce its effective workweek duration. As we worked with establishments belonging to firms with at least 50 employees, the worksharing was implemented on January 1, 2000 (cf. Section 1). As the variable *WS* captures whether the establishment reduced its effective workweek duration before the worksharing implementation, this can only account for changes that took place before 2000. In the “Worksharing” data source, after the matching, the majority of establishments reduced the effective workweek duration in 1998 and 1999.⁴ Thus, *WS* equals 1 if the establishment reduced its effective workweek duration in 1998 or in 1999. The dummy *WS* captures possible differences between the treatment and control groups prior to the policy change.

X is a matrix of covariates that can control for compositional changes. We took into account three types of covariates: standard characteristics, economic health indicators and workforce structure indicators. These variables are fundamental when describing STC behavior in France. The following variables are standard establishment characteristics: *Est_size_{it}* is a continuous variable that indicates the number of employees of the establishment; the establishment industry is captured by three dummy variables (manufacturing, services and construction); the establishment region is captured by eight dummy variables (eight aggregated geographic regions of France); *Group_{it}* is a dummy variable that indicates whether the establishment belongs to a financial group; *Restruct_{it}* is a dummy variable that indicates whether the firm to which the establishment belongs was restructured between 1996 and 2004; *Mono_est* is a dummy variable that indicates whether the firm to which the establishment belongs is a single-establishment firm or a multi-establishment firm; *Multi_STC* is a dummy variable that indicates whether an establishment used STC at least twice between 1995 and 2005. We used three indicators of the economic health of the firm to which the establishment belongs: the value-added variation rate ($Var_VA_{it} = \frac{VA_{it} - VA_{it-1}}{VA_{it-1}}$, where VA_{it} represents the value added for firm i during year t), the

profitability rate ($PR_{it} = \frac{EBE_{it}}{INV_K_{it-1}}$, which is the ratio of a firm’s profits during year t on capital investment taken during year $t-1$) and the apparent labor productivity ratio ($LP_{it} = \frac{VA_{it}}{EST_size_{it}}$). For these three variables, we worked with their values lagged by one

year. Concerning the workforce structure indicators, we used the following variables: *%TW_{it}* is the share of temporary workers out of the total number of employees; *%Subcontr_{it}* is the ratio of subcontracting expenses on the value added; *%FTC_{it}* is the share of a firm’s fixed-

⁴ Due to the very low number of establishments that reduced their effective workweek duration in 1996 or 1997, we decided to eliminate this category.

term contracts in the total number of employees and $\%Women_{it}$ is the share of women out of the total number of employees.

The dummy I captures aggregated factors that would cause changes in STC_ind even in the absence of a policy change. The coefficient of interest is δ_1 for the crossed effect of worksharing and I . The difference-in-differences estimate is:

$$\hat{\delta}_1 = (\overline{STC_ind}_{T,2} - \overline{STC_ind}_{T,1}) - (\overline{STC_ind}_{C,2} - \overline{STC_ind}_{C,1}) \quad (2)$$

where T indexes the treated group and C the control group, and 2 indexes the second period and 1 the first period.

Worksharing effects can vary with time. By using the panel dimension, we can evaluate the impact of worksharing between different points in time. We chose two years for the first period (1996 and 1997) and four years for the second period (2000 to 2003). As we had two STC outcomes, we finally estimated 16 different models. For each establishment, we fixed the values of the covariates at the beginning of the first period. According to this choice, the final sample contains 1,163 establishments for 1996 and 1,146 establishments for 1997.⁵

4. Evolution of STC between 1995 and 2005

[Insert figure 1]

In this section, we use descriptive statistics to analyze the possible effect of worksharing on STC use. Figure 1 shows the evolution of STC between 1995 and 2005 through three measures: the number of STC days (on the left scale), the number of STC employees (on the left scale) and the number of STC establishments (on the right scale).⁶ STC strongly decreased for the three measures. Between 1996 and 2005, the number of STC days decreased six-fold, and the number of STC employees decreased from 1.7 million to 300,000 (an 82% decrease). Concerning the number of STC establishments, the decrease reached 85%, diminishing from 34,000 establishments to 5,000. At the end of the 1990s, the fall may be mainly related to the economic situation (a period of fast economic growth). After 2001, the year of an economic reversal, the increase in STC use is not massive. Does the economic situation entirely explain the downward trend of STC after 2001? We suppose that establishments became less interested in STC, due to the worksharing implementation.

[Insert figure 2]

Figure 2 presents the connection between the economic situation and STC use over the last decade by illustrating two monthly series: the entrepreneurial opinion in manufacturing (on the left scale) and the number of STC days in manufacturing (on the right scale).⁷ This figure highlights the good adjustment between the business cycle and STC between 1995 and 1998. It also shows a weak disconnection in 1998 that coincides with the time of implementation of one of the worksharing laws and a strong disconnection when the legal work duration was obligatorily reduced for firms with more than 20 employees (in 2000). This figure seems to confirm the importance of worksharing's impact on STC.

5. Results

[Insert table 1]

⁵ This is due to a different number of missing values for covariates for 1996 and 1997.

⁶ For a complete description of STC between 1995 and 2005 in France, see Calavrezo, Duhautois and Walkowiak, 2008.

⁷ STC establishments are mainly found in the manufacturing industry in France (80% of cases).

Table 1 gives the difference-in-differences estimates performed on the sample described in section 2. It summarizes the results of 16 regressions on STC indicators and exclusively reports the coefficient $\hat{\delta}_1$ (see section 3). The comparison between establishments that did not reduce their workweek duration and establishments that implemented worksharing gave stable results (regardless of the outcome measure and the year of reference). Establishments that reduced their workweek duration significantly decreased their STC use, as compared with establishments that did not reduce their workweek duration in terms of STC days and number of STC employees. For instance, the use of STC decreased by 760 days and 41 employees per establishment between 1996 and 2000 and by 624 days and 39 employees per establishment between 1996 and 2003 (see Table 1). For a comparison between 1996 and 2000, as the sample covers 528 establishments that reduced their working time with an average decrease per establishment of 759 STC days, this would mean that worksharing “would explain” a decrease of about 401,000 STC days between 1996 and 2000. As in this sample, the total decrease in STC days was more than one million STC days between 1996 and 2000, we can “explain” 37% of this decrease as a worksharing effect. The remaining change is probably due to the other major determinant of STC, the economic situation. Consequently, at a macroeconomic level, this gives us an idea about the strong decrease of the STC recourse, as illustrated in Figure 1.

Table 1 also shows that, in terms of the number of STC employees, there is not a very significant difference between the average decreases when the year of the second period goes from 2000 to 2003. This means that worksharing led to a strong decrease in the number of STC employees, but this number seemed to remain stable between 2000 and 2003, although the economic situation deteriorated after 2000.⁸ However, in terms of STC days, the situation is different: firms used less STC days after worksharing, and the indicator “number of STC days” followed the economic situation. These two results show that there may still be some establishments that continued to use STC in a recurrent way after the implementation of worksharing, but for shorter durations. STC continues being a “structural flexibility” device for these establishments (see section 1).

In order to generalize and test the robustness of our results, we performed three additional estimations, and we also implemented a validity test for the DD models. In the first additional test, 1997 was taken as a year of reference (see Table 1). The results are similar to those obtained for 1996. For instance, the use of STC decreased by 404 days and 33 employees between 1997 and 2000. Nevertheless, the decrease in the STC indicators is less important than for 1996, for which absolute values are more important for STC days and employees. This is due to the fact that 1996 was a very unusual year: it corresponds to the year with the worst economic situation from 1995-2005 and with the highest level of STC use (Figure 1).

[Insert table 2]

For the second additional test, we performed DD estimations on a subsample of recurrent STC establishments.⁹ The distinction between the two samples was made regarding the frequency of STC use. Between 1995 and 2005, there were establishments that used STC several times. We defined a recurrent STC establishment as an establishment that used STC at least twice between 1995 and 2005. Normally, STC must be used only in exceptional circumstances; in other words, STC must be used rarely. A recurrent STC use can hide an improper use of the device in the eyes of the law. This distinction emphasizes the ambiguity

⁸ 2000 was a very good year in terms of the economic situation in France.

⁹ When the first period is 1996, the subsample contains 615 establishments, and when it is 1997, the subsample contains 584 establishments.

regarding STC use: the exceptional and non-repetitive conditions of STC recourse stated in the law are overstepped for some establishments and even for entire industries (automobile, clothing). We think that for recurrent STC establishments, the device is not used in exceptional situations but rather that it is probably used as an “ordinary” flexibility instrument. Table 2 shows the results of the DD estimations for the recurring sample for the two categories of STC variables. The results are similar, but the effects are much more important in absolute value, as compared with the global sample. For example, for the recurrent sample, worksharing led to a decrease of more than 1,293 STC days and of 67 employees per establishment between 1996 and 2000. We once again find the same comparable decrease in STC employees between 2000 and 2003, but a decrease followed the economic situation for the STC days indicator. It seems that recurrent STC establishments are even more likely to use STC as a “structural flexibility” device.

For a third additional check, we implemented another evaluation method: we tested evaluation models with kernel matching estimators. This model gives comparable measures for STC reduction after worksharing implementation and proves the robustness of our results.

[Insert figure 3]

Finally, in order to verify the “common trend assumption” hypothesis of the DD implementation, Figure 3 illustrates the STC-authorized days index for establishments that reduced their effective workweek duration before the worksharing implementation ($WS = 1$) and for those that did not reduce their effective workweek duration at all ($WS = 0$). Until 1998 (before the implementation of worksharing), we observe that the two indices vary in a similar way. In 1998 and 1999, there was an important breakdown, probably due to worksharing. After the worksharing implementation, we notice that the STC level is always lower for establishments that implemented worksharing.

In conclusion, the DD estimates show that worksharing leads to a decrease in STC days and employees: a quasi-constant decrease in terms of employees and a decrease following the economic situation for the STC days. Globally, it seems that worksharing would have progressively covered the needs in terms of flexibility (cyclical or structural) for which STC responded before its implementation. For establishments in which STC has a “cyclical flexibility” role, worksharing decreases the number of establishments using the device. Nevertheless, for establishments in which STC plays a “structural flexibility” role, the “substitution” between worksharing and STC was made through less important durations of STC (the STC days indicator), but the establishments continue using STC for their employees in a recurrent way. Thus, globally, worksharing seems to focus STC on its main role of employment protection.

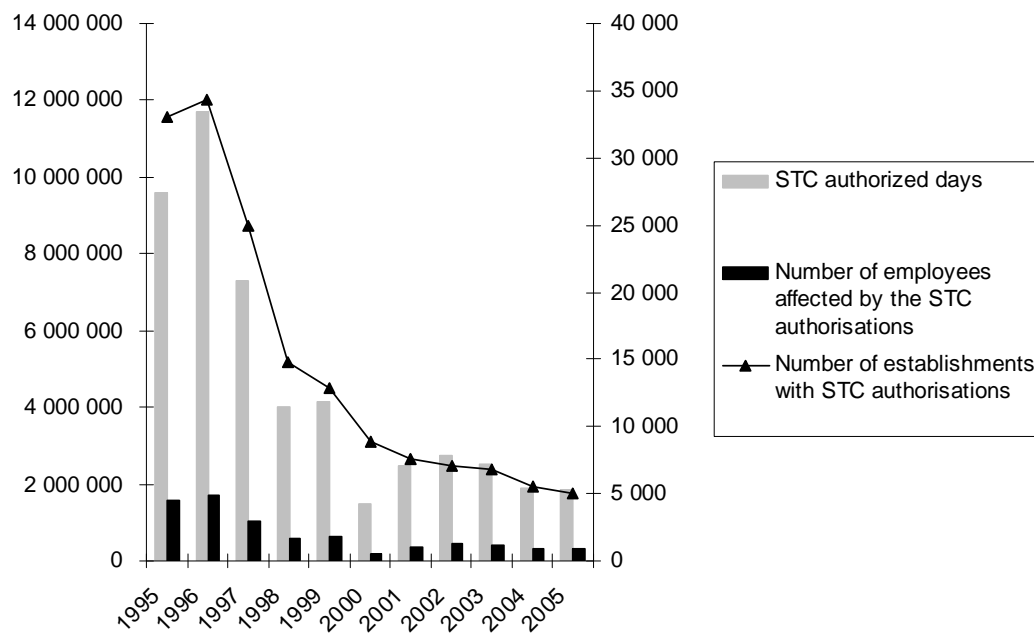
5. Concluding Remarks

STC can be seen as a tool for both flexibility and employment protection. Worksharing is a device with an initial objective of reducing unemployment. The French worksharing implementation represents a flexibility tool because firms can use worked hours differently. The STC reform of 2001 is directly related to the worksharing implementation. Establishments have had to prioritize the use of flexible working hours associated with worksharing. Our results show a “substitution effect” between worksharing and STC from 1996-2003. By using difference-in-differences estimators on a balanced panel of establishments, we quantified the average decrease in STC. Indeed, the flexibility role of STC seems to have collapsed. Until 2000, STC was inversely correlated to the economic situation, and after 2000, firms could no longer use STC as an internal flexibility tool. This suggests that, globally, worksharing has refocused STC on its main role, protecting employment.

References

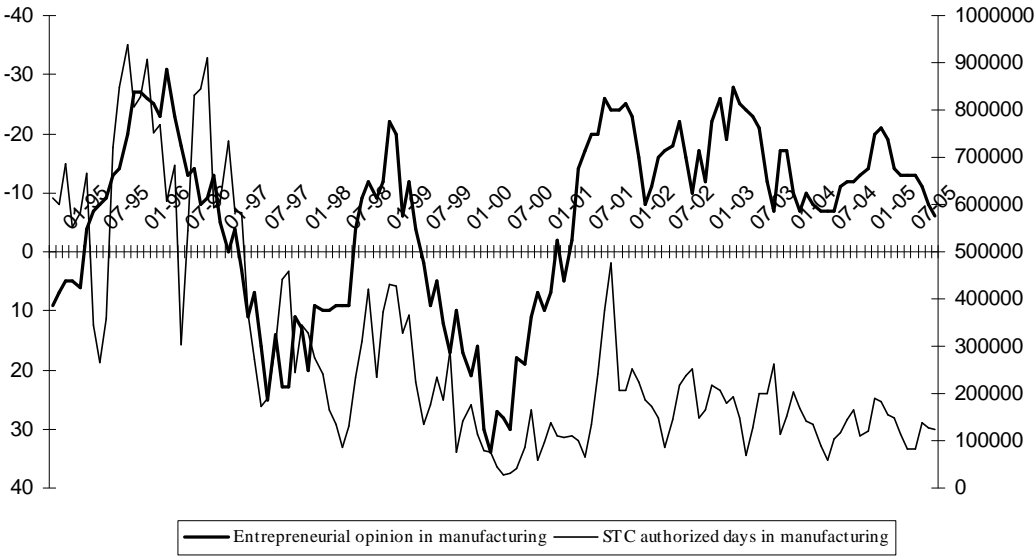
- Abraham, K.G. and S.N. Houseman (1993) “Does Employment Protection Inhibit Labor Market Flexibility? Lessons from Germany, France and Belgium”, NBER Working Paper, No. W4390.
- Askenazy, P. (2008) “A Primer on the 35-Hour in France, 1997-2007”, IZA Discussion paper, n° 3402.
- Burdett, K. and R. Wright (1989) “Unemployment Insurance and Short-Time Compensation: The Effects on Layoffs, Hours per Worker, and Wages” *The Journal of Political Economy*. Vol. 97, No. 6, pp. 1479-1496.
- Calavrezo O., R. Duhautois and E. Walkowiak (2008) “Le recours au chômage partiel entre 1995 et 2005 ”, Dares Working paper, n° 135.
- Kapteyn, A., A. Kalwij and A. Zaidi (2004) “The Myth of Worksharing”, *Labour Economics*, Elsevier, vol. 11(3) p. 293-313, June.
- Needels, K., W. Nicholson, S. Kerachsky, S. Walsh, R. London and D. McCanne (1997) “Evaluation of the Short-Time Compensation Programs”, Final report, U.S. Department of Labor, Mathematica Policy Research and Berkeley Planning Associates.
- Van Audenrode, M.A. (1994) “Short-Time Compensation, Job Security, and Employment Contracts: Evidence from Selected OECD Countries”, *The Journal of Political Economy*, Vol. 102, No. 1. (Feb.), pp. 76-102.
- Wooldridge, J.M. (2007) “What’s New in Econometrics? Lecture 10 Difference-in-Differences Estimation”, NBER Summer Institute, mimeo.

Figure 1: The evolution of STC over 11 years



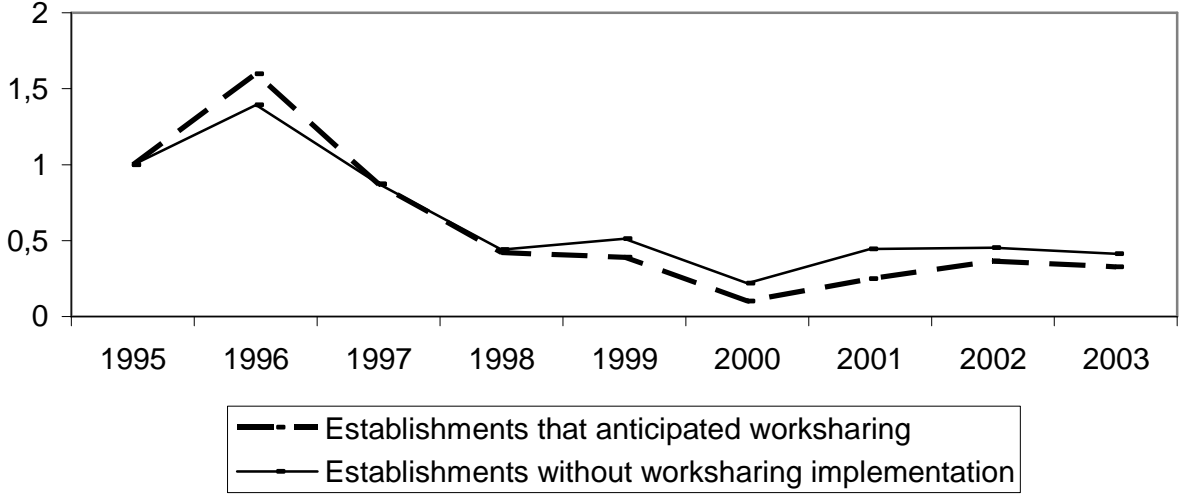
Source: Annual STC authorization panel obtained from monthly STC authorization databases covering the period 1995-2005 (the Statistical Department of the French Ministry of Labor and the Departmental Directions of Work and Employment).
 Field: More than 93,000 French establishments with STC authorizations (all sizes and all industries).

Figure 2: Economic situation and STC days in manufacturing



Source: Monthly survey of the economic situation (the French National Institute of Statistics) and monthly STC authorization databases (the Statistical Department of the French Ministry of Labor and the Departmental Directions of Work and Employment).
 Field: Manufacturing.
 Note: The left scale is reversed so that the high portion of the figure indicates a degraded economic situation and the low portion indicates a good economic situation.

Figure 3: The index of STC days



Source: Panel data obtained by merging seven databases. The STC-authorized days index is calculated using 1995 as the base year. Field: More than 1,100 survivor establishments between 1995 and 2003 that belong to firms with at least 50 employees (all sizes and all industries).

Table 1: Difference-in-differences estimates

<i>Year of reference 1996</i>			<i>Year of reference 1997</i>		
<i>Year of the second period</i>	STC_days	STC_empl	<i>Year of the second period</i>	STC_days	STC_empl
2000	-759.46 ***	-40.55 ***	2000	-403.87 ***	-32.82 ***
2001	-745.98 ***	-37.30 ***	2001	-380.96 **	-29.73 ***
2002	-600.04 ***	-33.37 ***	2002	-247.64 *	-27.44 ***
2003	-624.28 ***	-38.94 ***	2003	-275.80 *	-31.54 ***

Source: Panel data obtained by merging seven databases.

Field: More than 1,100 survivor establishments between 1995 and 2003 that belong to firms with at least 50 employees (all sizes and all industries, except for agriculture). When the first period is 1996, the sample has 1,163 establishments, of which 528 implemented worksharing and 635 did not reduce the effective working time duration. When the year of reference is 1997, the sample has 1,146 establishments, of which 520 reduced the effective working time duration and 626 did not reduce working time.

Table 2: Difference-in-differences estimates - recurrent subsample

<i>Year of reference 1996</i>			<i>Year of reference 1997</i>		
<i>Year of the second period</i>	STC_days	STC_empl	<i>Year of the second period</i>	STC_days	STC_empl
2000	-1292.74 ***	-67.27 ***	2000	-645.76 ***	-56.19 ***
2001	-1287.34 ***	-58.44 ***	2001	-643.76 **	-47.27 ***
2002	-1049.14 ***	-60.61 ***	2002	-416.42 *	-52.36 ***
2003	-1080.86 ***	-66.22 ***	2003	-463.18 *	-55.81 ***

Source: Panel data obtained by merging seven databases.

Field: More than 500 survivor establishments between 1995 and 2003 that belong to STC recurrent firms with at least 50 employees (all sizes and all industries, except for agriculture). When the first period is 1996, we have 615 establishments, of which 296 implemented worksharing and 319 did not reduce their effective working time duration. When the year of reference is 1997, we have 584 establishments, of which 283 reduced the effective working time duration and 301 did not reduce working time.