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Work and Compensated Unemployment in the Performing Arts
Exogenous and Endogenous Uncertainty in Artistic Labour Markets *

by

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In the economics of artistic labour markets, some attention has been given 1) to the unbalanced growth of stable organizations employing workers on long-term contract and subject to the well-known Baumol disease and 2) to how individuals active as independent, self-employed workers have to be compensated for highly uncertain prospects in artistic occupations. It has also been observed that like other sectors facing unstable demand and rapidly changing market conditions, the art world is in search of increasing flexibility, especially when teamwork is required. In the performing arts - the film industry, audio-visual productions, theatres, orchestras,… - both forms of jobs coexist : some workers sign long-term contracts, while others hold freelance jobs shaped by multiple short-term hirings with fee payments. Proportions vary greatly from one country to another, but everywhere workers often hold multiple jobs, so that the employment status is blurred at the individual level. Multiple job-holding is not the only way of securing income. An original scheme is the French "intermittency" work scheme which combines features from both statuses. As is the case with the self-employed, intermittent workers receive fees and must build a network of contractual relationships. And as is the case with stable workers, they offer labour services entailing subordination to their successive employers; in return, they become equated with wage earners and they are eligible for unemployment compensation.

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We study two large data bases on job opportunities and unemployment compensation in France between 1980 and 1992. We show 1) why a highly uncertain labour market attracts a number of job applicants that grows much more rapidly than the total labour demand; 2) how agents in the industry may shed their professional risk; 3) how agents constrained by job rationing learn to optimize the use of the unemployment compensation program, specific to that industry.

1. Contingent work in the artistic labour market

A core distinction with respect to employment strategies contrasts firms that operate with contingent workers and short-term contractual ties and firms that emphasize low turnover and high productivity, bear costs of screening, trying out and training and use optimal reward schemes based on long-term contracts and tenured jobs. The former category of workers seems to be most appealing in firms where jobs are simple and easy to routinize : since workers are indeed mainly untrained and unskilled, wages are low and productivity differences between individuals are small. This corresponds to the secondary labour market where workers are highly mobile and wages are much more flexible than for tenured jobs.

Describing this type of labour force, Okun (1981) notes however that

> « these weak employer-worker attachments also seem to apply to certain types of blue collar craftsmen who have relatively high skills and earn high pay - construction and dock workers, workers in the printing industry, and so on. These characteristics seem to arise most prominently when 1) an industry has many firms within a locality; 2) a firm has extremely variable demands for labour; 3) the worker's skill is "general" in Gary Becker's sense, that is, readily transferable across firms within an industry; and 4) the individual worker's degree of skill categorized by conventions that develop among employers or unions or through government-sponsored occupational licensing. Carpenters thus may be classed as apprentices, journeymen, or masters; and references from one employer to the next carry weight. In such cases, workers develop an attachment to a local industry rather than to an individual employer.» (A. Okun, 1981, pp. 82-83)

Okun should have mentioned artists as well as technicians and other workers involved in artistic production. Employment and work organization features in the arts meet reasonably well the paradoxical picture combining highly skilled, highly mobile and well-paid workers moving from one employer to the next while accumulating experience through on-the-job training and highly diversified jobs. Of course, contingent work is not the only form of employment in the art world, but it accounts for a growing part of the labour force wherever artistic production needs more than the work of a single creator.

This is especially true of the performing arts, on which we focus our study. Of course, contingent work is not the only form of employment. Large organizations operating on a pluri-annual basis - permanent organizations like symphony orchestras, opera houses or radio and television

broadcasting companies - hire workers on long-term as well as short-term contracts. By contrast, temporary organizations or small organizations use mainly or exclusively short-term contracts. It should also be noted that most artists work under the latter employment form and that non-artistic workers are increasingly hired on that basis, as shown below. People may combine the different contractual forms: for example, musicians in orchestras can also be hired as freelancers for some studio recording jobs and so on, so that the distinction is somewhat blurred at the individual level. In fact, the range of contractual arrangements offers many opportunities.

Okun does not explain why this paradoxical type of contingent labour occurs in certain industries. We shall refer to the organizational characteristics of artistic production. Contingent employment structure and the corresponding search for flexibility are a core feature of artistic work, the "high rate of change over time of the content of activities", according to Stinchcombe's (1968) phrasing in his pioneering work on craft administration of production and structures of activities. This occurs for at least three reasons. First, artistic products are often designed as prototypes and their market value builds on originality and on more or less pronounced differentiation. Secondly, the combination of activities needed to produce a movie, play or opera involves a large number of different artistic occupations and crafts, and each participant shifts to a new project a few hours, days or weeks after the initial one, with some new requirements and challenges. Thirdly, tastes (especially in the most speculative parts of the art markets such as musical hits, contemporary painting, blockbuster novels, mass audience designed movies and serials) undergo unpredictable shifts. Finally, uncertainty can be seen as a built-in characteristic of the creative process. On the supply side, it makes artistic work highly attractive, since predictable outcomes would lead to routine work (Menger, 1989). On the demand side, consumer versatility and taste for novelty give social and economic value to newness and originality as far as these are unpredictable. Uncertainty must be considered as the true condition of the breakthrough innovation that opens to its author a new (temporary) monopoly and, simultaneously, as the threat contained in the destructive aspect of every true innovation.

Far from meeting the canonical dual labour market criteria, contingent work in the performing arts therefore allows producers to meet organizational constaints. But as fiercer competition takes place among a larger number of producers and as increasing variance in activity levels requires more and more flexibility, short-term contracts tend to be substituted for long-term ones mainly as a device for reducing overheads. In that sense, work contingentization in the performing arts may be similar to that observed elsewhere in the economy.

As stated by Stinchcombe, flexibility needed in industries like construction, shipbuilding, ladies'garments, research and development activities or the movie industry, can be reached through three main social requirements :

« a) a system of performance contracts and subcontracts, rather than stable employment contracts, for subsets of activities. (…) Rather than provide stable job descriptions for permanent roles, one wants to specify the objectives to be reached and let people adapt their own roles to the requirements of the objectives. (…) One requires a larger repertoire of skills in each worker and delegates much more responsibility to him to decide which activity from his repertoire is appropriate; (…)
b) a system for transmitting information about performance capacities of people between productive groups - a system of certification of competence. The requirement of a larger repertoire of skills and a greater degree of discretion in the workforce implies that the workforce must be highly skilled. But the rapid reconstruction of social systems implies that skill cannot be tested and developed in long employment. This combination requires supra-firm institutions for training and certifying workers as skilled; (…)
c) a minimization of the fixed overhead costs, especially administrative and capital costs. (…) A great deal of reduction of fixed administrative overhead is achieved by subcontracting (A. Stinchcombe, 1968, pp. 260-262)

The performing arts turn out to be a good example : for each project - film, opera or theater performance, musical show, etc - new teams are formed and then dispersed. Networks help to build the stable relationships that are needed to lower transaction costs. They facilitate hiring procedures through patronage and trustworthy ties among peers, and they convey reliable information about skills and talents quite rapidly, since formal screening and hiring processes would often be inefficient and too costly in a contingent work scheme.

Okun's characterization deserves attention for one more reason : it suggests that the distinction between short contractual arrangements (at firm level) and employment processes (at industry level) is blurred by the multisided activities of each worker as well as by the dense formal or informal relations between employers. Indeed artistic production is based on three components : (a) a nexus of ties between firms involved in the different parts of the production process and between the many employers who draw from the artistic labour pool, (b) an original way of processing information through this network in order to minimize the costs and length of the sorting and hiring operations and (c) conventional industry-wide negotiations and arrangements regarding wage and fringe benefit schemes. An effective way to overcome the complexities of the disintegration of the production process is to rely on spatial concentration. Storper and Walker (1989) point out that « where transactional relationships between production units are especially dense, those relationships can have geographically-sensitive cost structures. The greater the costs per transaction, the greater the probability that firms will agglomerate in order to reduce them. » Again, the prototype character of artistic production meets the criteria of high distance-sensitivity of transactions mentioned by Storper and Walker :

« Three types of transactions are especially affected by distance : those that cannot be standardized - that is, are unforeseeable - and require frequent search and recognition (these appear where markets and product designs change frequently); small-scale linkages which cannot enjoy volume discounts on transport costs; and problematic linkages that must be resolved through personal contacts or renegotiation. » (M. Storper and R. Walker, 1989, p. 139)

Artistic activities show a very high level of spatial concentration in a few locations or even in one dominant city in each country. It is also remarkable that even in the presence of active decentralization of cultural public policy, the concentration rate of artists and art professionals does not decline. The Parisian case is perhaps the most striking : during the 'eighties, the population of

artists and professionals involved in cultural production expanded rather rapidly in France (+ 55% between 1982 and 1991) but the share of artists living and working in Paris and Ile-de-France also increased (from a 45.8% to a 54.1% rate; see Menger,1993).

2. Short-term labour contracts and the excess numbers of workers

Under perfect competition conditions, labour allocation would not be biased by individual characteristics since labour is perfectly homogeneous : each unit of labour demanded can be supplied by any worker in an auction type market. Actually, spot labour markets with perfect substitutability among workers are most likely to be found wherever simple and routine work performed by unskilled workers prevails. But the artistic labour market highly values individual differences in productivity. Although substitutability among artists and among other personnel involved in a teamwork of course exists, skill and ability differences among professionals are highly rated both for the main creative functions and for less visible collaborations (*e.g.* film editor, director of photography, sound mixer) to the production.

How can such a paradoxical situation (heterogeneous workers combined with an auction type labour market) work? Our answer takes into account the double-sided - functional and cost saving - requirement of flexibility : employers want to draw from a large pool of artists and personnel in order to build efficient and well-matched teams, to reduce overheads and because they may gain from the variety of talents and skills at hand. However, they do not want to bear the cost of securing workers from risks of unemployment.

This leads to a steady excess supply of workers. Christopherson and Storper (1989), Menger (1994a), Rannou and Vari (1995) show that with the extension of disintegrated production and subcontracting practices, the number of workers grows much more rapidly than the quantity of work in demand. As a result, although the labour market expands, the number of hours worked per head diminishes. Several factors act as disequilibrium forces.

There are no barriers to entry which limit access to jobs as under labour institutions regulating access to jobs like the roster system, nor is there any powerful licensing system to deter untrained candidates from jobbing. Cultural entrepreneurs are increasingly in search of new talents, in order to get high returns from speculative bets on young artists : usually not well-paid, but highly committed to their work, young talents meet the market demand wherever this demand is shaped by fashion and by age-sensitive tastes. Short-term contracts facilitate these bets since employers are free to hire and fire at will and leave aside all the aspects of career building. Thus employers need an

oversupply of candidates among which they can sort, once they have an idea about the expected market value of the work of each candidate.

This is the reason why « the artists' labour market will seemingly always be prone to shortages of talented workers while at the same time there may be an excess supply of less talented workers » (Towse (1992)). One should note however that "talent" should be considered not only as an exogenous factor of market success but also as an endogenous factor shaped by competition through innovation. The more competition raises the rate of innovation or, at least, of differentiation between prototype-like works, exploiting and stimulating consumer demand for novelty, the more the sorting mechanism will be based on shifts in specification and search for new talents.

To mention scarcity of talent does not tell us the whole story of disequilibrium in artistic labour markets. Talent needs time to be revealed and assessed; moreover, talent does not refer only to innate, very unequally distributed abilities.

First, professionalization and success in artistic occupations depend only partly on initial training : although there is considerable variation between the various forms of art (writing or acting obviously require shorter and less specific formal training than performing classical dance or classical music), an on-the-job learning process that extends over the whole lifetime is a common feature, especially in creative activities, where the hallmark of highly valued artistic work is variety, originality and novelty.

Secondly, even if one were to assume that innate abilities command success much more than formal training, talent could express itself only by meeting training and work situations that reveal the multiple characteristics of what artistic achievement really is and that confront the artist to public evaluations. Therefore we can think of a dynamic model in which workers accumulate skills through experience and learning by doing; at the same time, they accumulate information on how their endowment in skills and talent is rated; this allows them to continuously assess which class of workers they probably belong to (for theoretical contributions along these lines, see Mac Donald (1982), Miller (1984), Rosen (1986)).

If only non-routine work is demanding enough and provides enough information about one's capacities to reveal how well-suited one is to an artistic occupation, the non-routine aspect also helps to explain why people can remain for some time in artistic occupations without major financial or reputational successes. If innate talent were the sole determinant of success and if talent could be detected rapidly, then quit rates in artistic professions would be much higher. Uncertainty concerns not only the first part of career building but extends over the whole span of the professional lifetime. One can never be sure whether one's next picture will be a hit or will at least

be held in high esteem by peers. Just because the only certainty in work is that its course always faces discontinuities and a high rate of change in content, one can expect that success will come with the next project one gets involved in. The only certainty is that one will steadily experience considerable variation in and uncertainty about the amount of work one is offered from time to time.

In a contingent work set-up, the variety of work experiences, which is highly formative and informative, must be balanced against the risk of unemployment and against the highly uncertain prospects of career continuity. We cannot simply assume that on average people in the artistic freelance labour market are true risk-lovers; nor can we assume that they are mainly moved by such a love for the arts that they could even earn much less without quitting, provided that psychic income is always secured. Therefore we have to explain how workers can be induced to face uncertainty and how they can manage such risky careers.

According to conventional economic theory, a labour contract is mutually advantageous when it provides both parts with insurance against misbehaviour and uncertain prospects. Several theoretical models have tried to capture the informational and temporal dimensions of the mutual insurance built-in property of the contractual relationship. Most of them show that only long-term contracts can meet such requirements to capture intertemporal aspects missing in short-term relationships - incentives to long-term productivity and insurance against wage fluctuations.

In the case of contingent work, the risk of unemployment is pervasive and insurance devices through long-term contractual relationships are, by definition, missing. Since Adam Smith, economic theory has dealt with such situations, mainly in terms of compensating wage differentials (see Rosen (1986) and for a discussion of the application to the arts, Menger (1989)). The typical worker will view the risk of unemployment as something that must be compensated for by a higher pay. Greater risks in earnings prospects in an occupation should also reduce the supply of labour. As already noted by Adam Smith and by Alfred Marshall, some risk-prone workers who overestimate their chances of success may view it as an attractive gamble to enter an occupation where a few do very well while most do poorly, but the majority of workers will require a pay differential to compensate for uncertainty about lifetime earnings.

Compensation for uncertain labour prospects is in fact observed in the performing arts since intermittent artists and workers earn much higher hourly wages than those employed on a long-term basis. The wage premium is the price that employers must pay in order to draw on a reserve army of underemployed individuals whose availability has to be secured : a loss of flexibility in employment decisions would be more costly for firms. But, as noted especially by Christopherson and Storper (1989), this compensating differential scheme operates only partly, since hourly wages are not

higher for greatly underemployed workers than for their more successful fellows who are frequently rehired and who can build continuity in their career.

Compensating wage differentials therefore play their role mainly at industry level : in industries like television or motion pictures, where contracts are, on average, very short, workers are better paid than in the live performing arts where spells of intermittent work are longer. But individual differences in hiring probabilities are not subject to compensation : here is another kind of risk at stake. That is simply to say that contingent work in the performing arts stems from the freelance status of employment, and that artists as well as other skilled workers in the performing arts do build their career on the basis of their reputation. In such a context, accumulation of hiring records acts as a reputation signal in a self-reinforcing process : hiring calls for hiring. As in professional careers (Kanter (1989)), the key organizing factor for a freelance career is the whole community of employers and fellows, but the reputation-based market value of each member in this community determines his individual probability of moving upward or downward. Building a career in the freelance system indeed means that work opportunities are frequent enough and involve the chance to accept more demanding or rewarding assignments : this is the only way for artists as well as for craft workers to acquire greater or new skills and therefore increase their reputation.

Now, as the intermittent working system expands, it generates more competition among a growing number of performers and workers for a less rapidly increasing number of workhours. At any time the number of job candidates exceeds the supply of full-time jobs and the quantity of work allocated varies considerably among the workforce. Since job allocation takes place on an individual basis and involves on-the-job accumulation of skills and reputation, talented experienced and network-building artists and workers are constantly hired; by contrast, younger or less skilled individuals, loosely connected with the most active entrepreneurs, form a peripheral population facing discontinuous employment and longer spells without work. Christopherson and Storper (1989) have found that, in the U.S. motion picture industry, differences in annual earnings of workers reflect differences in hours worked more than in wage rates. The situation is different for artists, since praise and public recognition of creative talent lead to much wider earning inequalities, based on individual market value and not only on the amount of work supplied.

3. Risk diversification

From studies on artistic occupations we know that income sources can be diversified in three main ways, which are not incompatible and may be combined : artists can be supported by private sources (working spouse, family or friends) or by public sources (subsidies, grants and commissions from the state, sponsorship from foundations or corporations); they can work in cooperative-like associations by pooling and sharing their income and by designing a sort of mutual insurance

scheme; and finally, they can hold multiple jobs. This last possibility forms a means of diversifying occupational risk that seems unusual in labour markets. As mentioned by Drèze (1987, p. 349-350),

> «there exists a marked difference between the risk-sharing opportunities applicable to human capital, which are narrowly limited; and those applicable to physical capital, which are quite extensive. Financial intermediation has made an important contribution, through the creation of negotiable securities. Unlike human capital, financial assets are divisible and free of transportation costs. This opens up opportunities for diversification which are substantial (although still imperfect). (…) As noted by Meade (1972) : "While property owners can spread their risks by putting small bits of their property into a large number of concerns, a worker cannot put small bits of his efforts into a large number of different jobs. This presumably is a main reason why we find risk-bearing capital hiring labour rather than risk-bearing labour hiring capital" ».

Now contingent workers in the arts just put "small bits of their efforts into a large number of different jobs", since they contract with various employers for short periods. In facing a highly unpredictable labour demand and intense competition with their fellow workers, artists as well as other intermittent workers have to learn how to build a career by spreading their occupational risks. In a highly suggestive study on freelance composers working for the Hollywood film industry, Faulkner (1983; Faulkner, Anderson, 1987) describes how career portfolios can be formed by mixing one-shot ties, which are the normal feature of a loosely coupled hiring system, and recurrent, 'bread and butter' accounts with a few producers : Faulkner shows that such a spreading of accounts allows the artist to hedge his bets, to get information about a wider environment and to accumulate credits as an optimal human capital investment program :

> « Accumulating credits is of course crucial but it is advantageous to accumulate those credits through a multiplicity of ties. Quantitative data show us there is advantage in strong and weak ties, and the structure of success is partially defined by that. (…)
> First, a career portfolio mixed with one-shot and recurrent ties renders freelancers less vulnerable to the downswings in the fortunes of their producer-employers, let alone the liability of dependence on a strong tie to a single filmaker. Second, visibility and multiple connections combined reassure other film producers. They see their colleagues placing their 'bets' and resources on certain film composers. This commitment is a kind of "cultural insurance", drawn upon and imitated by producers when they are deciding which composers they are going to try to hire for their own films. Third, a diversity of film work increases the chances that a composer will face challenges and perhaps arrive at novel solutions for dramatic problems. (…) A range of styles decreases the probability of narrow typecasting. A mix of business relationships also forces the composer to adapt to various filmmakers and their films, budgets and personalities. (…)
> Integration into networks, diversification of ties and projects, and adaptability are in the career interests of freelance composers. Indeed, they *are* their career interests. » R. Faulkner (1983, pp. 202-203)

This observation has been recently supported by our findings on performing artists in France : with a portfolio of mixed ties as well as with a sectoral diversification of hirings, artists are financially better off and can survive longer on a highly risky labour market (Menger (1994b); Menger, Rannou and Vari (1996)).

Another way to secure a livelihood - that of multiple job-holding inside or outside the arts - is better known, although it may be difficult to gather reliable information on the different categories of earnings combined by artists to make a living (see Throsby and Mills (1989), Throsby's contribution to this volume, Towse (1996), and, for monographs on artistic occupations, Moulin (1992) and Peacock and Weir (1975)). Such combinations are more or less efficient according to the

kind of additional jobs held by artists : human capital considerations militate for arts-related jobs (as demonstrated by Throsby) and portfolio choice considerations for salaried side-jobs, namely teaching positions, to mention one of the most frequent arts-related income source for artists.

The last way of shedding one's professional risks - that of unemployment insurance - is designed to insure salaried workers. In many countries it is beyond the reach of the freelancers who are numerous in artistic professions; in some countries however, freelancing can be equated with a wage-earning position, as we will see. For those eligible to unemployment benefits, the resulting combination of security and independence at work may play two different roles for those who work enough to meet the eligibility criteria:

1) that of providing earnings replacements, which reduce the compensating pay differential associated with the risk of unemployment and the uncertainty about lifetime earnings. Actually the position on that contingent labour market may be optimized so that each individual permanently combines fees and unemployment benefits;

2) that of subsidizing non-working time which can be used as leisure time, or as training time for a future demanding job, or as searching spell for new jobs.

In the former function, unemployment is seen as a constraint on individual behaviour along a theoretic demand approach whereas in a labour supply explanation, unemployment can be interpreted as the outcome of a worker's choice with regard to job search. Ambiguity also arises from the way uncertainty itself is interpreted : as observed by Drèze, « in the case of the self-employed, the distinction between endogenous and exogenous economic uncertainties is not always clear-cut » (op. cit., p.349). Should a lack of jobs and an unsuccessful career be attibuted to insufficient ability or to low demand for the kind of ability the artist is endowed with? Consequently, insurance against career failures does raise questions, as we will show by studying how the French Unemployment Insurance scheme has operated between 1980 and 1992.

4. The performing arts labour market in France between 1980 and 1992

Employment in France during the 'eighties rose sharply in the performing arts. Labour demand was enhanced by the growth of the audio-visual industry as well as by the dramatic increase in public fundings for culture provided by the State and by the Local Authorities (Menger, 1993). This demand could lead to two different forms of employment : long-term jobs, or short-term hirings. The latter may typically spread the available work amount among a growing number of agents whose career expectations are shaped by the cultural boom situation. Since the French official labour statistics apparatus does not provide detailed data on employment in the performing arts nor on the two distinct employment forms, one needs other sources to measure this trend.

Our investigation is based on administrative sources. Data on employment in the performing arts come from the Groupement des Institutions Sociales du Spectacle, a health insurance and pension complementary fund which keeps the employment and payment records transmitted by each employer for every hiring period. The data base which we have built out of these records provides extensive information on the bulk of the labour force[1]. As already mentioned, a core distinction has to be drawn between those who are hired on a "permanent" contract basis by only one employer - a full-time job or a part-time job during at least several months - and those who work as contingent, or "intermittent" workers and who are successively hired by several employers for extremely variable but mainly very short durations .

Most artistic jobs are intermittent ones; the only true exception is in the classical music sphere, where one finds long-term jobs in orchestras and opera houses (largely financed by state subsidies in France). In contrast, executives, technicians and clerical workers employed in the performing arts fall into both types of employment status. We do not take into account permanent artistic jobs in our data on employment and its trend in the performing arts since our source does not cover this small part of the artistic workforce; anyway these are a minority in the performing arts.

Tables 1 and 2 show how the labour market for both types of employment status has expanded over the period 1980-1992. The total amount of work, measured in days, has increased by 50% and total wage payments have almost doubled in real terms. The share of intermittent work has increased from 24% in 1980 to 33% in 1992. Since hourly earnings are higher for intermittent work, the share of contingent workers in total wage earnings amounts to 53.3% in 1992 against 41.5% in 1980. The case of non-artists is especially striking : hirings have increasingly shifted from long-term contracts to intermittent ones. Wage earnings provided by intermittent work contracts represented 23.8% of the whole amount of non-artists' earnings in 1980, but 40.3% in 1992.

During the 'eighties, the number of intermittent workers doubled, contrasting with the rather moderate increase of the workforce employed on a long-term (so-called "permanent") basis. Although they are, in 1992, nearly twice as numerous as permanent workers (100,000 against 55,000), they account for only one half of the total amount of working days (6.7 millions against 13.7 millions). Thus the average annual duration of work is four times lower for contingent than for permanent workers. In addition, the activity of the former is increasingly fragmented : on average, a contingent worker signs 4.9 contracts in 1992, against 3.9 in 1980.

[1] We have no detailed statistical information on artists, craftspeople and administratives working in a few large organizations (symphony orchestras, opera houses, TV and radio companies) since the health insurance and pension fund set up by these organisations is not managed by the Griss. For 1992, this amounts to about 13000 employed workers, that is less than 10% of the entire population we are concerned with.

Competition turned out to be fiercer among growing numbers of producers and workers during the 1980's. Increasing search for flexibility in this highly competitive industry led to shorter labour contracts. Again, artists and non-artistic personnel differ in the way they could adapt to this situation : artists, whose number grew less rapidly, did maintain their average annual work duration by being hired on shorter terms but more often whereas others, who are three times as numerous in 1992 as 12 years earlier, are hired as often but for shorter durations. For the latter, work under an intermittent employment status means an increasing unemployment risk.

In order to understand how a work life can be managed under such conditions, we shall explore the compensating role of a key device, the unemployment insurance program that operates in the performing arts. Since unemployment periods are compensated for eligible workers, the two factors (increase in numbers of workers and decrease in working time per individual) may trigger a growing use of the UI compensation system as well as changes in the way work and compensated unemployment periods may be interlinked optimally .

Trends in the performing arts labour market : 1980-1992

Table 1 Characteristics of indidivual activity according to the employment status

	CATEGORIES OF PERSONNEL*	Number of agents	Number of employment contracts	Average number of contracts per agent	Average length of contract (in days)	Average length of activity per agent (in days)
1980	Permanent workers **	43966	51367	1.17	207.6	244.3
	Intermittent workers ***	50780	200619	3.9	16.5	63.7
	among which artists	*39154*	*163989*	*4.2*	*13.4*	*55*
	among which non-artists	*11626*	*36630*	*3.1*	*30.2*	*93.1*
1985	Permanent workers	50765	59561	1.17	220.9	261
	Intermittent workers	69197	285995	4.1	17	69.4
	among which artists	*44573*	*208942*	*4.7*	*12.9*	*60.3*
	among which non-artists	*24624*	*77053*	*3.1*	*28.2*	*85.9*
1990	Permanent workers	55633	63401	1.14	217.9	250.8
	Intermittent workers	95603	462215	4.8	13.9	66.2
	among which artists	*52827*	*327120*	*6.2*	*8.9*	*54.6*
	among which non-artists	*42776*	*135095*	*3.1*	*26.1*	*80.6*
1992	Permanent workers	55081	62222	1.13	219	249.4
	Intermittent workers	99867	489781	4.9	13.8	66.8
	among which artists	*53804*	*349385*	*6.5*	*8.8*	*56.8*
	among which non ratists	*46063*	*140396*	*3*	*26.1*	*78.5*

Source : data provided by the GRISS (Groupement des Institutions Sociales du Spectacle) and computed by the Centre de Sociologie des Arts

* Since workers can have more than one employment status in a year, we classify agents according to the employment status under which they have spent most time each year.
** Permanent workers are those who are hired on longer (fixed or unfixed term) contracts by only one employer. A distinction is made between three kinds of workers in the film industry, the audio-visual industry and the live performing arts, according to conventional agreements : "cadres", or executives (*e.g.* film director, director of photography, …), technicians (*e.g.* sound engineer, lighting technician, stuntman) and blue collar workers (*e.g.* stage-hand).
*** Intermittent workers are those who are hired successively on shorter fixed term contracts by several employers. Artists in our data (e.g. musicians, actors, dancers, choreographer, …) are only those hired on such an intermittency basis.

Table 2. Trends in activity : 1980-1992

CATEGORIES OF PERSONNEL	Increase in the number of workdays 1980-1992	Increase in total wages (in constant francs) 1980-1992	Increase in the number of agents 1980-1992	Increase in the number of contracts 1980-1992
Permanent workers	+ 27.8%	+ 59%	+ 25.3%	+ 21%
Intermittent workers	+ 106%	+ 153%	+ 96.7%	+ 144%
among which artists	*+ 41.9%*	*+ 85.8%*	*+ 37.4%*	*+ 113%*
among which non artists	*+ 234%*	*+ 241%*	*+ 296.2%*	*+ 283.3%*
Total population	**+ 45.8%**	**+ 96.8%**	**+ 63.5%**	**+ 119%**

Source : data provided by the GRISS (Groupement des Institutions Sociales du Spectacle) and computed by the Centre de Sociologie des Arts

5. Unemployment insurance and its uses in the performing arts.

As mentioned above, the situation of the workers who are employed on short-term jobs in the performing arts industry in France differs from that prevailing elsewhere. Except if they opt for a self-employed status, intermittent workers are equated with salaried workers, since they work, even for a few hours, under contractual relationships that provide each actual employer with decision-making authority. The so-called “lien de subordination” that characterizes the position of a salaried employee in the French law is therefore taken for granted, although artists and skilled workers very often show in their work an autonomy that brings them close to independent workers. Like for other temporary or intermittent workers hired under fixed term contract, intermittent employment in the performing arts provides entitlement for Unemployement Insurance compensation. However, within the French general UI system, a specific UI Scheme - hereafter called Performing Arts Unemployement Insurance Scheme, in short PAUIS - was settled in 1969 : specific rules were designed so as to deal with the pecularities of the hiring process in the arts and to allow workers to alternate work with non-work spells over a compensation entitlement period. Note that this PAUIS consists of two UI programs : non-artistic intermittent workers employed in the film industry (their specific UI program is called hereafter “Program 28”) are compensated differently from those who work in the audio-visual industry and in the live performing arts and from artists (“Program 29”) (see Appendix below for a detailed presentation).

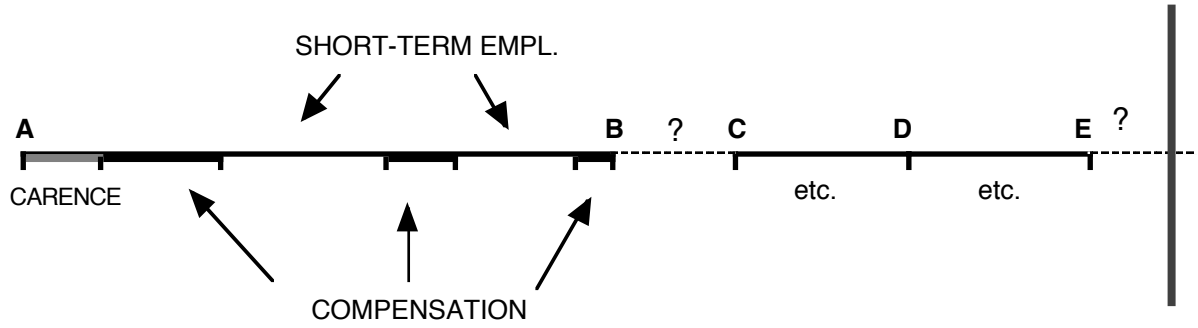
We want to know not only how that specific UI program has evolved as the number of workers increased but also if agents make a different use of it as they are better informed and experienced. The data on the Performing Arts UI compensations and benefit claimants we study come from the French UI Fund (UNEDIC). Our empirical investigation is based on administrative records that indicate the unemployment insurance history of all claimants between 1980 and 1992. About 8% of initial compensation entitlement periods (hereafter called CEP) have been dropped out, because of inconsistencies; nevertheless the data set registers nearly 80,000 individuals with more than 250,000 CEPs.

Within each CEP, every period of unemployment compensation is recorded, along with periods during which no compensation is paid ("carence"). The first and last day of each period are known as well as the amounts of daily allowances. Identification and characterization of the individual and information on the employment contract supporting the CEP are also given.

As shown in Figure 1, every CEP (A-B, C-D and D-E) can be divided into three main types of situation : compensation, "carence" and short-term employment during which compensation is cut off (some interruptions are reported but not as working time and will hereafter be called "other interruptions"). We have no information on the working periods (except for their duration);

information on occupation between CEPs (B-C and E-... on the figure) is also missing. The vertical bar indicates that the data are truncated (on December 31, 1992).

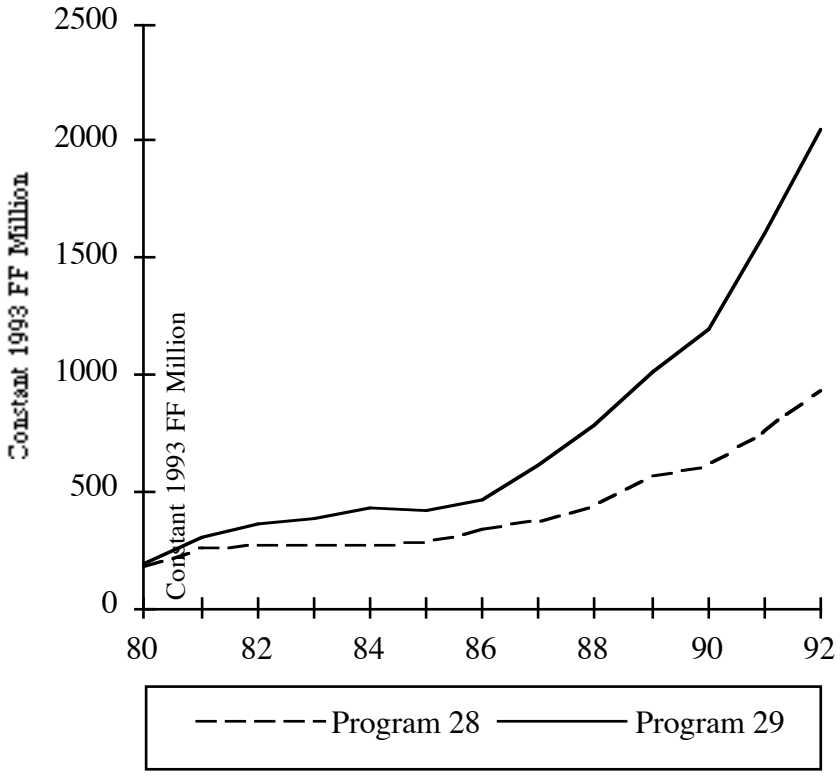
Figure 1
Lifetime structure of an artist



5.1. Total spending and population growth

Figure 2 and Table 3 give the amount of compensation spent every year over the two programs 28 and 29 (values are in constant French Francs 1993). Compensation is multiplied by 8.2 between 1980 and 1992. As illustrated in figure 2, both level and growth rate are lower for program 28 than for program 29. The annual cost of program 28 is multiplied by 5.2 while that of program 29, by11.1. Between 1990 and 1992 alone, compensation in program 29 increased by 171%.

Figure 2
Total amount of compensation



Growth has not been steady, however. It was lower during the period 1982-85 and increased afterwards, with a slow down in the year 1990. During the late ‘eighties - early ‘nineties, annual growth rates reached 19% in program 28 and 24% in program 29.

The number of beneficiaries also increased dramatically (Table 3). As shown in Table 4, this trend partly results from the increasing proportion of potential applicants who actually get benefits. During the last years of the period, almost all the workers who met the eligibility criteria (*i.e.* who worked more than 50 days over a year) were covered by UI. The growing number of beneficiaries, however, explains only partly the rise in spending: it accounts for some two thirds of the total growth. The remainder results from increased spending per individual. This, in turn, was generated by two mechanisms: (1) a rise in daily remittances and (2) an increased share of compensation periods over an individual's lifetime.

Table 3

Total spending, number of beneficiaries, number of days, 1980-1992

Year	*Total compensation (million constant 1993 FF)*	*Number of beneficiaries*	*Number of days compensated*
1980	363	7,089	1,751,095
1981	557	9,044	2,562,202
1982	630	10,457	2,812,779
1983	649	11,968	2,998,894
1984	701	12,989	3,383,670
1985	700	14,268	3,441,738
1986	798	16,286	3,760,382
1987	980	18,339	4,557,717
1988	1,229	22,153	5,573,895
1989	1,581	26,323	6,850,570
1990	1,816	28,940	7,478,276
1991	2,366	34,394	9,176,253
1992	2,983	38,250	11,263,969

Table 4

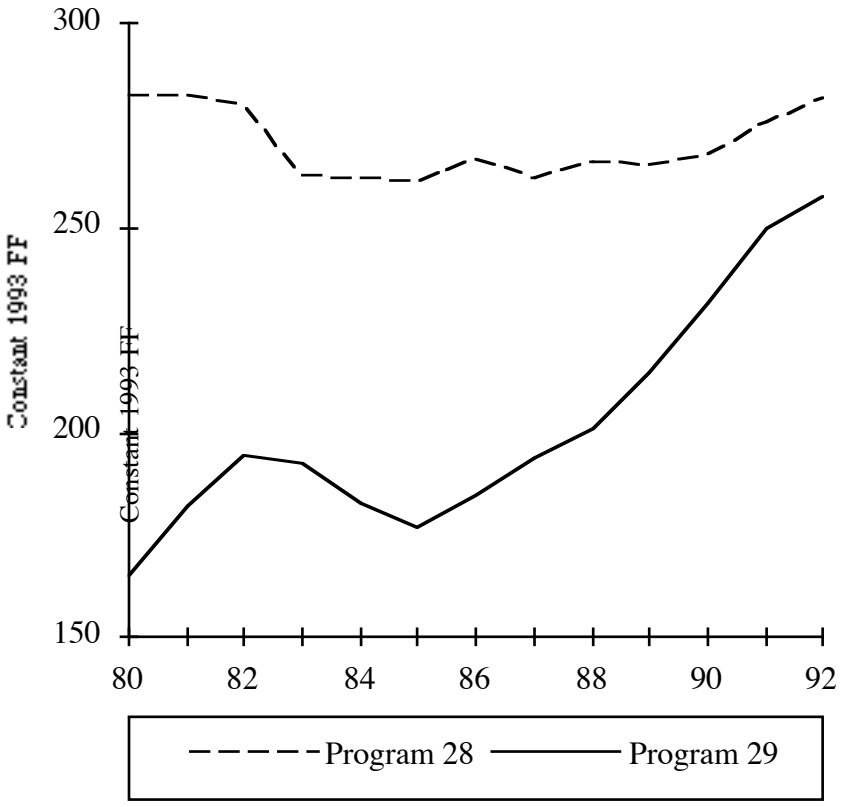
Potential and actual beneficiaries of UI benefits

Year	*Number of eligible intermittent workers (a)*	*Nomber of actual beneficiaries (b)*	*Ratio of actual to potential beneficiaries (b) / (a)*
1980	20660	7089	34.3%
1985	29535	14268	48.3%
1990	41480	28940	69.8%
1992	42251	38250	90.5%
1980-1992	+ 106%	+ 440%	

5.2. Rise in daily remittances

In constant terms, average daily remittances follow different patterns in the two programs (Figure 3). In program 28, the 1980 and 1992 averages are similar (FF 281) although a small decrease occurred between these two dates. Program 29, however, basically shows a significant increase from FF 165 in 1980 to FF 258 in 1992. This accounts to a large extent for the differences between the two programs; but it should be interpreted with care, since remittances are indexed on daily wages. A change in either indexing rules or wages may thus explain the observed pattern.

Figure 3
Average daily remittances



Average wages have grown by 96% in the two programs, but this may reflect changes in employment and population structure rather than actual increases in wage rates. The wages considered here are averaged on all contracts giving right to compensation, and they may have been truncated if higher than a given ceiling.

We now turn to the rules governing benefit rates, and denote by *RW* the reference wage and by *DB* the daily benefit. Table 5 presents the estimates of coefficients *a* and *b*, assuming the following rule :

$$DB = a + b\,RW.$$

This equation reproduces exactly administrative rules for program 29 but things are more complicated for program 28 so that it should be viewed as an approximation. Ordinary least squares adjustments are run separately for every CEP starting year. The coefficients show that, in the context of strongly asymmetric information, the PAUIS' main line of action has been to adjust administrative rules in order to contain spending. This occurred during the years 1984-86, when the system was still on the edge of explosion.

Table 5
Wage-benefit relation

Year	*Program 28*		*Program 29*	
	a	*b (%)*	*a*	*b (%)*
1980	194	20.1	56	43.2
1982	168	20.5	50	43.7
1984	200	8.0	54	33.0
1986	201	8.5	55	31.3
1988	205	7.9	56	31.0
1990	205	7.7	55	31.6
1992	214	7.4	52	31.0

Coefficient *a* is a value in constant 1993 FF. All coefficients are strongly significant. There are 95,017 observations in program 28 and 159,996 in program 29. There is no R2 as the model is estimated without an intercept.

5.3. Lifetime structure

A claimant's lifetime consists of CEPs, split mainly into compensation spells, short-term employment spells, and periods between CEPs during which anything can occur *but compensation*. If, on average, individuals spend more and more time getting compensation over a year, annual spending per head will increase. As a matter of fact, the average benefiting artist received remittances for 247 days in 1980 and 294.5 days in 1992 (see Table 3).

The underlying changes in behaviour are of particular interest. From Table 6, it is clear that there has been a significant reduction in the share of compensation time, made up by increased short-term employment time ("carence" and "other interruptions" show little change).

Table 6
Changes in the structure of CEPs

Year	*Share of employment time*	*Share of compensation time*	*Number of employment periods*	*CEP length (days)*	*Number of observations*
1980	4.7%	82.9%	4.4	418	8,668
1982	6.7%	80.5%	4.5	338	10,303
1984	9.7%	78.2%	6.5	302	13,591
1986	9.8%	75.8%	8.0	311	19,436
1988	12.3%	75.1%	9.9	309	25,648
1990	11.2%	74.7%	10.7	314	25,450
1992	18.7%	68.8%	15.5	352	37,909

Employment represented 4.7% of time in CEPs started in 1980 and 18.7% in those started in 1992, with figures slightly higher in program 28 (once again, more rapid changes took place during the 1990-92 period). A closer look at the distributions brings out a very important feature. In 1980 only 36% of CEPs included *some* employment time. This figure rises to 60% in 1985 and to 90% in 1992. Therefore, inclusion of some working time into CEPs has generalized over the period to *become the norm*. This points to a significant change in behaviour, whereby the flexibility of the system has been exploited more and more intensively.

An additional way to measure this phenomenon is to look at the number of employment periods. These rise from 4.4 to 15.5, indicating an increased fragmentation of CEP time (Table 6). Thus, the growing share of employment time does not result from longer employment periods, but from *more employment contracts of shorter average length*.

A specific incentive to report short employment contracts is provided in program 29. In this program, one is credited with 8 hours per working day when the contract lasts at least 5 days long, but one benefits 12 hours credit a day when it is less than 5 days long. Since this is absent from program 28, there is a simple way to show that this feature affects individual behaviour. Consider the average length of employment periods is each program : except in 1980, it is more than 5 days in program 28 while, except in 1981 and 1983, it is lower than 5 days in program 29. There is no

time trend in either program, but growing homogeneity is attested by steadily decreasing variance of the statistics (from more than 20 in 1980 to 10 or less in 1992, in both programs).

As the share of compensation within CEP time decreases, growing compensation time per year and per person results in shorter periods *between* CEPs. Take all individuals who had at least one CEP in a given year and consider the number of different CEPs each of them underwent during that same year (Table 7). If total CEP length is subject to little change, this gives a measure of how close CEPs are one to another. On average, an individual had 1.07 CEPs in 1980, 1.36 in 1986, 1.35 in 1990 and 1.42 in 1992. In fact, average CEP length decreased during the early 80's, but increased afterwards, implying stronger reduction in "time between CEPs" than suggested by these ratios[2].

Measuring the length of time between two consecutive CEPs of the same individual (typically, period B-C in Figure 1) provides a different assessment of this pattern. This is reported in Table 7 by year of beginning of the period (year-end of the first CEP, thus point B in Figure 1). Coupled with our previous findings on CEP structure, results reveal that, in the early 80's, a typical career consisted of CEPs with no interruption for employment, separated by nearly a year. In the late 80's, CEPs would be separated by less than 200 days, and interrupted by numerous short periods of employment. The picture is that of fragmented time, with intricate working and compensation periods and, maybe, less secure situations.

Table 7
Time between consecutive CEPs

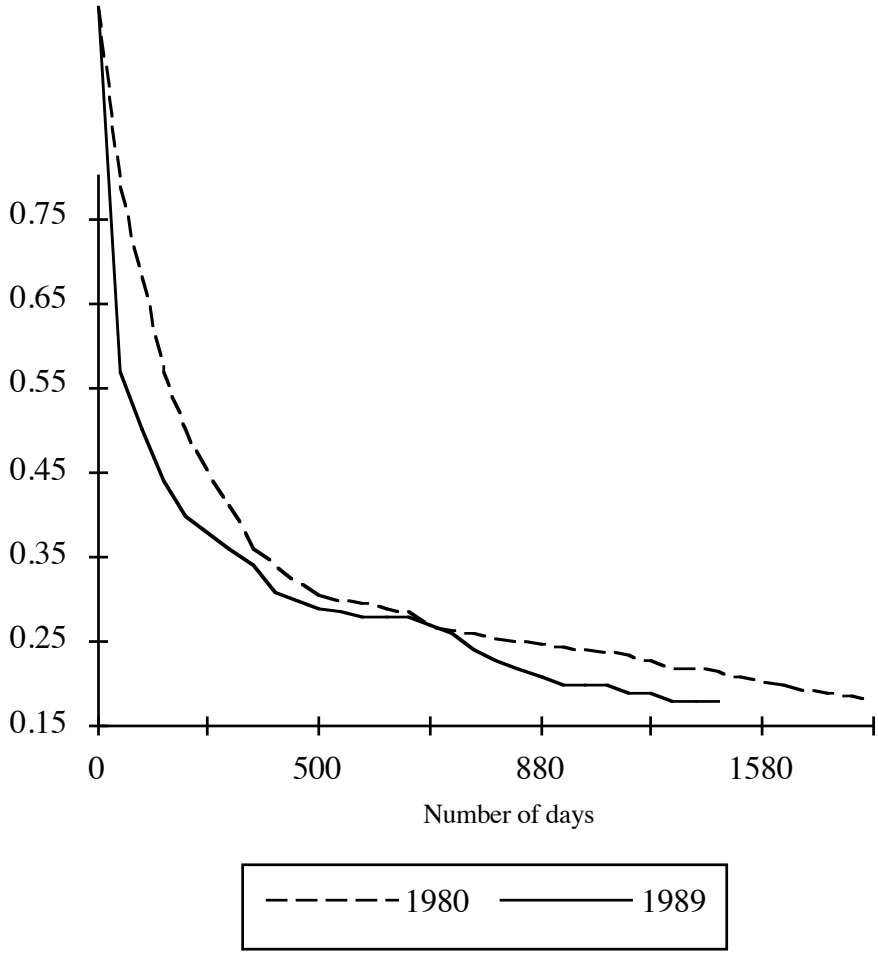
Year	*Number of CEPs per year*	*CEP length (days)*	*Number of days between CEPs**
1980	1.07	418	346
1982	1.25	338	279
1984	1.32	302	233
1986	1.36	311	172
1988	1.44	309	140
1990	1.35	314	195
1992	1.42	352	11

*by year-end of first CEP.

[2] CEP length is determined by administrative rules so that its change is not readily interpretable in terms of individual behaviour. Generally, however, longer CEPs may be related to enhanced job opportunities.

The sharp reduction in "time between CEPs" in the later years results to a large extent from a selectivity mechanism. Consider a CEP that takes place towards the end of our sample period; the following CEP is observed only when "between-CEP time" is short enough (so that it ends before December 31, 1992). In other cases, the potential following CEP will fall out of our available period of observation and the "time between two CEPs" is not observed. The later the year, the more acute the problem, so that the 1992 figure is not meaningful and early ‘nineties figures should be interpreted with care. This difficulty can be partly overcome when estimating survival rates, that is probabilities that the period between two consecutive CEPs lasts at least a given length of time. When a CEP is not followed by an (observed) second CEP, we consider the length to be truncated on December 31, 1992.

Figure 4
Survival rates for "between-CEP duration"
(by starting year of CEP)



Non-parametric estimates of the survival function can be computed using the Kaplan-Meier estimator (see Kiefer (1988)). As evidenced by Figure 4, the probability that a "between-CEP period" lasts at least *t* days is always smaller if the period started in 1989 than it is if it started in 1980, for all values of *t* for which the survival function is defined[3]. The problem with this computation is that we cannot distinguish individuals who have left the system for good from those who are potentially part of it and will reappear at some point with a new CEP. For this reason, survival rates do not tend towards zero as *t* becomes large. Yet comparisons are meaningful for a limited range (t between 0 and 1,500 days in 1989). The result that "between CEPs periods" get shorter is thus confirmed.

5.4. Core population behaviour

[3] Other years can be included, but they are not presented in order to keep the figure readable.

The changing pattern of aggregate behaviour may be viewed as the outcome of a time trend affecting the whole system. An alternative would be to assume learning mechanisms: individuals with sufficient experience in the system make a more efficient use of available opportunities. In order to assess this hypothesis, we define as a core population those who were first observed in 1980 and who remained in the system (whether in CEPs or not) until 1992.

It is important to make sure that they are not significantly different in terms of characteristics, other than experience in the system. Statistics reveal that there are less program 28 individuals in the core population and more of them are employed in small firms (1 to 4 employees) and in the Paris area, but the differences are small and the two populations are similar with respect to other characteristics (age, sex, qualification, etc.).

Table 8 indicates that the behaviour of the core population did not differ from that of the total population in terms of CEP composition, except in 1982-84. As for "between-CEP time", it is clear that core and total population follow the same trend although absolute duration is slightly different (longer for core until 1982, comparable afterwards).

Table 8
CEP structure and "between-CEP time"
in core and total population

Year	*Share of employment time*		*Share of compensation time*		*Between-CEP time (days)*	
	Total	*Core*	*Total*	*Core*	*Total*	*Core*
1980	4.7%	5.0%	82.9%	83.0%	346	705
1982	6.7%	10.3%	80.5%	76.1%	279	481
1984	9.7%	10.4%	78.2%	74.7%	233	210
1986	9.8%	9.9%	75.8%	73.7%	172	151
1988	12.3%	11.9%	75.1%	71.9%	140	132

1990	11.2%	11.7%	74.7%	72.8%	195	199
1992	18.7%	19.1%	68.8%	66.2%	11	18

5.5. Returns to fragmenting CEP time

Organizational constraints in artistic production provide an obvious demand-side explanation for the observed fragmentation of working time and its frequent alternation with compensation spells. In view of the growing pressure and competition on the labour market for performing arts it is worth considering also a supply-side interpretation. It can be expected that employment periods will act as experience variables and will positively affect wages and the amount of daily compensation. In contrast, long periods of unemployment may be interpreted by potential employers as a negative signal and explain why, in a competitive environment, maximizing agents would tend to break unemployment periods with work.

There are three additional possible supply-side interpretations. First, reputation effects and personal networks may be an important determinant of employment opportunities and higher wages. They may depend more on frequency than on total duration of employment contracts. The second interpretation derives from the fact that eligible artists and workers spend a large share of their lifetime receiving unemployment remittances. According to a job-search approach, assume that an agent has to choose between a short-term and a long-term contract, carrying the same daily wage. If he chooses the first, he will soon be available for a possibly more interesting offer; but there may also be no offer before long or only poorly paid ones. Thus, choosing the long-term contract may reveal insurance securing behaviour. However, things are more complicated in our setup : expected compensation is also a determinant of his choice, and the benefit depends not on total wage income, but on some index of the *wage rates* obtained over a series of employments. In this respect, it will be optimal for a risk-averse agent to seek for many short-term contracts rather than for a few long-term ones: in doing this, his average wage rate will get closer to the expected wage rate. This standard "diversification" behaviour may have to be arbitraged with the insurance strategy first presented, and the outcome will depend on various parameters. But job fragmentation may happen to be globally optimal.

A last reason why fragmentation may lead to higher wages and benefits has been discussed above : employers may declare a smaller number of working days than actually performed, in order for the employees to report a higher wage *rate* (and receive larger benefits). Since we do not observe actual but only reported wage rates, these look larger if declared working periods are smaller.

A simple way to test these supply side interpretations is to check whether the number of within-CEP work periods (holding the share of working time constant) during the previous CEP affects positively the wage index on which compensation is based in the current CEP. This would explain why, in addition to the constraints agents face on the labour market, it may be in their interest to have a fragmented working time. Our strategy is to run wage equations where the log of the wage index is regressed on age, sex, qualification, sector and type of occupation[4]. Shifts over time are accounted for by time dummies (referring to the beginning of the contract that gave rise to the current CEP). Three variables from the previous CEP are added : total CEP time, the share of CEP time devoted to short-term work and the number of work episodes. Because these variables and employment characteristics are determined simultaneously with wages, the estimates may suffer from an endogeneity bias. Moreover, as little information on individual characteristics (such as education) is available, there are unobserved individual effects that could be correlated with some explanatory variables, resulting in a further bias. For instance, individuals who, for some reason, tend to have many short employment contracts may be those who have, for the same unobserved reason, higher wages. We would then wrongly attribute high wages to fragmentation. Exploiting the panel dimension of the data will help solve one of these difficulties. If we restrict the sample to individuals with two CEPs or more, *within* estimators can be computed in order to remove unobserved heterogeneity[5]. Lagged values are sometimes used as instruments to solve simultaneity problems, but they are valid instruments as long as there is no significant autocorrelation between the residuals of the equations, and there are good reasons to expect that shocks should be transmitted over an artist's career (unexpected success for instance). As there are no other possible instruments, they are nevertheless presented but *within* estimates are preferred.

Table 9
Effects of within-CEP working time and its fragmentation on reported wage rates

	Program 28		
	OLS	*2SLS*	*WITHIN*
Number of working periods	0.00119	0.00569	0.00106
	(4.72)	(5.10)	(3.26)

[4] The last three variables are based on the contract that gave rise to the current CEP.
[5] To obtain a *within* estimator, every variable *Xit* where *i* is an individual and *t* a period is replaced by *(Xit - Xi.)* where *Xi.* is the average of *Xit* over all periods. Deviations to the mean are thus considered instead of levels and individual heterogeneity is removed.

Share of working time	0.18372 (8.82)	1.27867 (11.17)	0.09295 (4.51)
CEP length (days)	-0.00003 (-2.47)	-0.00065 (-11.50)	0.00003 (1.74)
R2	0.12	0.11	0.10

The dependent variable is the log of reference wage rate index. t-statistics are in parentheses. Number of observations : 48,032 for OLS and 2SLS and 33,728 for *within*.

	Program 29		
	OLS	*2SLS*	*WITHIN*
Number of working periods	0.00453 (23.02)	0.01884 (27.79)	0.00296 (16.47)
Share of working time	-0.12643 (-6.14)	-1.00813 (-10.37)	0.14350 (8.18)
CEP length (days)	-0.00017 (-14.77)	-0.00096 (-14.79)	-0.00010 (-8.11)
R2	0.15	0.14	0.15

The dependent variable is the log of reference wage rate index. t-statistics are in parentheses. Number of observations : 71,269 for OLS and 2SLS and 46,629 for *within*.

Coefficients obtained by OLS, instrumental estimation (2SLS) and within estimation are presented in Table 9, where we report only parameters of interest. Programs 28 and 29 are presented separately and they reveal fairly contrasted patterns. Interpreting the negative effect of CEP length in all but one equation is difficult because, as already noted, it is to a large extent determined on an administrative basis. In contrast, the share of working time has an expected positive sign in program 28, which confirms its interpretation in terms of experience. The negative sign of the OLS and 2SLS estimates for program 29 is puzzling and the satisfactory within coefficient confirms that the former two may be biased.

Most interesting is the very significant positive effect of the number of working periods. This implies that not only total working time matters, but also the extent to which it is fragmented. Based on the within estimates, splitting the same amount of working time into 5 periods instead of 1, for instance, would raise the wage by 0.4%.in program 28 and 1.2% in program 29. Moving from the average 4 periods in 1980 to the average 15 periods in 1992 would increase the wage by 1.2%.and 3.3% respectively. These increases are not extremely large, but it is striking that fragmentation should have an effect at all.

Table 10
Effects of the number of employment periods
on reported wage rates over time

	Program 28	*Program 29*
Starting year of CEP		
1980	0.00203	-0.00071
1982	-0.00061	0.00294*
1984	-0.00011	0.00428*
1986	0.00139	0.00388*
1988	0.00243*	0.00305*
1990	0.00146*	0.00589*
1992	0.00158*	0.00558*
R2	0.12	0.15

*Coefficients that are significantly different from zero. For other notes, see Table 9.

The above equations do not help to explain why the number of working periods (thus the time fragmentation) has increased over time. It would be more convincing to make it clear that the returns to fragmentation have been rising with time. To do this, we allow the coefficients to vary every year. OLS results are reported in Table 10. The positive effect starts in 1982-83, increasing slightly in 1990-92 in program 29. The effect appears later in program 28 (1988) and decreases. The effect is now sizeable in program 29 since in the years 1990-92, a shift from 1 to 5 working periods would raise wage rates by about 2.4%. Although the *within* estimator is preferred to OLS in terms of consistency, identification of time dummies would be impossible due to collinearities.

A reasonable conclusion is that the effect of work fragmentation is very small in program 28 but significant in program 29. This may reflect the technical nature of labour in program 28, that may result in more standardized wage rates than for program 29, which concerns artists.

Conclusion

In the currently prevailing intermittent employment scheme, unemployment compensation turns out to be a more and more advantageously internalized benefit. The marginal cost is not borne by firms and workers in the sector but by the whole UI fund for salaried workers which absorbs the increasing deficits of the particular Performing Arts UI Scheme. It is well-known that where

experience rating, under which an employer's UI tax rate depends upon the stability of employment he provides, does not exist (like in France) or is incomplete, the structure of UI financing systems subsidizes the benefit payments of some industries at the expense of others, provided that the aggregate UI system does balance. In our case, contributions paid by the employers and the workers to the UI fund represent a declining share of the whole allowance expenses : in 1984, the amount of spending was 1.8 times higher than that of collected contributions; in 1992, it is 6 times higher. The PAUIS is therefore not simply an individual insurance scheme, but represents also a growing subsidization of the performing arts industry. The condition of aggregate UI system balance being harder to satisfy in periods of steep increases in general unemployement rate, the deficit of the PAUIS has on several occasions given rise to public controversy on the PAUIS' operative rules.

How did the UI fund administration react to the above-mentioned evolution? Through successive and limited disincentive modifications that made the UI compensation less generous or the eligibility criteria more selective. For example, in 1984, the income replacement rates decreased significantly as displayed above in Table 5. But deficits did not stop increasing. In 1991 and again at the end of 1992, new modifications were negotiated, consisting mainly of a regressive compensation scheme and a slight increase in the length of the initial uncompensated period for each new UI spell. But as it is designed, the PAUIS' running can only partly escape its subsidizing role. Substantial moral hazard and adverse selection problems are pervasive, induced by the insurer's inability to distinguish unpredictable exogenous constraints on the hours intermittent workers are able to sell in the market from the worker's choice with regard to job search or allocation of non-market time. Similarly, it is well-known that employers do exploit asymmetrical information about their work and job allocation agenda in order to include entitlement to UI benefits in the wage bargainings with their contingent employees. Organizations may also collude with their employees by hiring them repeatedly for short periods, in order to secure a kind of internal labour market without bearing the whole costs of long-term relationships.

In their survey of unemployment insurance, Topel and Welch noted that « to the extent that workers take future unemployment benefits into account when evaluating a job offer, this effect must be ambiguous. While workers will certainly be more selective with respect to job offers if benefits are increased, the value of any particular job must be comprised of both income from working and benefit income from contingent unemployment. The increase in benefits will allow firms to offer the same value of an employment contract with a lower wage.» (Topel and Welch, 1980; see also Atkinson and Micklewright's very useful critical review, 1991). Much less ambiguous are the effects on employers : through UI cross-subsidy, the industry with such an unstable demand and volatile employment did expand by having a larger part of the income required to attract workers paid through UI benefits. The subsidizing role of the PAUIS is striking at the end of our period since the amount of UI benefits paid to compensated intermittent workers

represents in 1992 about the half of the amount of wages and fees paid to the whole population of intermittent workers. The question it raises is whether short-term hirings are exogenously or endogenously determined. As we saw, the specific unemployment compensation scheme appears to provide an incentive for both firm and worker to short-time working.

Obviously, the labour force employment status differentiation depends on the means that are used, along with true public cultural support, to reduce overheads as well as to gain in flexibility. But unlike the direct public and private sponsorship that supports non-profit organizations, this growing indirect subsidization benefits the whole performing arts industry. And paradoxically enough, wherever competition between non-profit and profit organizations occurs, the former, which still contract mainly on a stable and long-term basis, suffer from the labour cost reduction opportunities which insured contingent work provides for profit organizations, while playing a training and risk-diversification role for a number of artists and workers whose activity in the contingent labour market is steadily fragmented and uncertain.

APPENDIX

The French Performing Arts Unemployment Insurance Scheme

Unemployment insurance for the performing arts adapts the French general UI program to the contingent work frame that prevails in these arts : each intermittent worker active in the field - whether an artist or a technician or an administrative - meets the UI eligibility criteria when he performs enough hours of work for employers considered (by conventional agreement) as belonging to the performing arts field. In a significant number of cases, people may be hired as artists for a particular job and as executives, technicians, clerical or even blue collar workers for the next. This refers to the multiple-job holding situation very common in the arts. Our convention is to regard as artists those who have more of 50% of their work time in jobs recorded as artistic ones.

Like for UI systems in most countries, eligibility conditions require a substantial amount of employment over a given period : this amount is computed by adding up all paid employment spells over the last 12 (or 24 or 36) months. Only those who have worked a minimum of 507 hours in a given twelve-month period (or 1014 hours in a twenty-four-month period and so on) qualify. Many workers fail to meet the qualification requirement. The more hours accumulated, the longer the duration of the entitlement to compensation. The record of past job applications helps to compute the level of daily UI benefits a worker will receive over the period. Two schemes of UI compensation exist :

- workers in the film industry come under the so-called “régime 28” or “annexe 8” (“program 28” in our text). That scheme consists of a compensation based on the minimum daily payment for each category of job according to conventional agreements in that industry;
- workers employed in the audio-visual industry and in the live performing arts and artists wherever they work in the performing arts come under the “régime 29” or “annexe 10” (called program 29 in our text). In that case, one is entitled to receive a proportion of the average amount of previous earnings : the taxable wages obtained by each eligible applicant during his different work spells are taken into consideration, up to a certain ceiling; the benefit payment is a given proportion of the average hourly wage earned plus a daily fixed payment.

There is no benefit during an initial period - called “carence” - the length of which varies with the number of accumulated workhours.

During the spells of compensated unemployment, an eligible worker can work on short-time contracts and nevertheless stay in the UI system : during these workdays, he gets of course no UI benefits. Each of these working periods is taken into consideration so that the worker, if accumulating enough of these job records, is allowed to requalify for the next compensation entitlement period (called CEP in our text), as soon as his current entitlement ends**.**

The Performing Arts Unemployment Insurance Scheme is financed through contributions from employees as well as from employers. Since it belongs to the whole French UI program, the deficits it has shown for several years are made up by the general UI Fund. So it may be said that the whole community of workers and employers subsidizes, through its UI contributions, the performing arts industry.

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