The Effects of Minimum Wage Regulation in France

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Minimum Wage Regulation: An Overview

Minimum wage regulation in France dates from 1936. It has been amended in 1945, in 1950, and most recently in 1970.[1] These regulations continue an older tradition of state intervention in wage determination. In 1848 a decree fixed a minimum wage for manpower subcontractors, that is, firms that temporarily place employees at other firms but continue to manage and pay them. In 1915 a minimum wage law for domestic workers was established. In neither of these cases, however, were the categories of covered workers numerous.

The 1936 general minimum wage law mandates collective bargaining between employers and wage earners once firms are covered by the law and requires that bargaining agreements provide minimum hourly wages by occupation and region. The minister of labor can order these agreements extended to all branches of an industry. In this case, privately bargained wages become minimum wage rate regulations imposed on employers.

After the wage freeze of World War II, a new administrative stance was adopted in 1945: commissions were set up composed of representatives of workers, employers, and government. They had the task of fixing not only a minimum wage but also a wage hierarchy for all wage earners of industry, commerce, and the professions. The minister of labor could modify these wages at his discretion without, however, modifying the hierarchy established by the commissions.

NOTE: I wish to thank Laurence Forteville and Jacques Généreux for excellent research assistance and Bernard Lentz for comments and generous help in translation. Any shortcomings remain my own responsibility.

[1] The Law of June 24, 1936, completing the Matignon agreements of June 7–8, 1936, permits the imposition on a whole industry of signed collective bargaining agreements between employer associations and union representatives. The legal character of bargaining agreements had been recognized by the Law of March 25, 1919. On the demand of either a worker or an employer organization, the minister of labor calls together the representatives of the two parties at either a local or a national level. The accord reached at this time must specify minimum wages by category of wage earners. The agreement is then made mandatory for the whole industry.

pational guaranteed minimum wage (SMIG) fixed by government order. While this minimum covers all sectors of economic activity, it allows for geographic differences in the cost of living. The SMIG does not cover agriculture, where there is an agricultural guaranteed minimum wage (SMAG), usually lower than SMIG. SMIG is tied to the consumer price index whenever the index has an increase of 2 percent or more sustained for two months.

This system has evolved into a single minimum wage for all regions and professions, which came about for all practical purposes in 1968.

Current Legislation. The Law of January 2, 1970, replaces SMIG by SMIC, interoccupational minimum wage growth, the system currently in force. SMIC is in part indexed on the cost of living and in part fixed at the discretion of the government. All price increases of 2 percent or more lead to a readjustment of SMIC by the same percentage on the first day of the month after the publication of the price index. The government further revises SMIC at its discretion. Finally, the 1970 law provides that "in no case may the annual purchasing power growth of SMIC be less than half the growth in the purchasing power of the mean hourly earnings recorded in the quarterly survey of the Ministry of Labor."

Because of the diversity of terms and conditions of employment embodied in total compensation, it is useful to state the forms of remuneration affected by the regulation.[2] The law provides that the hourly wage to be considered "is that which corresponds to an effective hour of work taking account of the working conditions and of the diverse benefits which have the character of complementing wages, but excluding reimbursed employee expenses, benefits and wage premiums provided by law, and for the Paris region the transportation premiums."

The SMIC covers all wage earners eighteen or older in the entire country with the exception of overseas departments.[3] Apprentices and

[2] Various premiums and fringe benefits come to be added to the base wage. Their diversity makes it difficult to evaluate the effective hourly wage. In general, premiums intended to compensate for particular kinds of work are not considered fringe benefits. On the other hand, seniority premiums, piecework premiums, and the thirteenth and fourteenth months of salary that some firms pay their workers constitute fringe benefits in those cases where they are permanent or constitute an "important" part of total compensation. Regulation sets the amount beyond which pleasant working conditions or fringes are considered wages.

[3] In the overseas departments, the minimum wage is set each year by a decree "with account taken of the local economic situation." Nevertheless, when the metropolitan SMIC is increased, the overseas minimum wage must be increased in the same proportion.

physically handicapped workers are excluded from coverage, as are prisoners, about whom the regulations are imprecise, and draftees, who receive only a nominal daily allowance.[4]

While SMIC affects hourly wages, an additional regulation establishing a minimum legal monthly earning was introduced in 1972.[5] This monthly minimum is calculated by multiplying the SMIC by the monthly hours of work. In practice, the legal workweek is fixed at forty hours; in calculating the monthly hours of work, account is taken of holidays.[6] If a firm reduces the workweek below forty hours, it is considered to have paid the worker an additional allowance while still assuring him of the monthly SMIC. The state reimburses the firm for one-half his allowance up to a certain ceiling.

Finally, it must be remarked that the fixing of SMIC is in principle independent of the determination of other salaries. Collective negotiations settle the structure or hierarchy of wages for the various grades of labor. They may establish a base wage below SMIC, but this wage will be "fictitious" because no pay actually received may be below SMIC. This system does allow the establishment of the wage structure, however, without reference to SMIC.

Furthermore, the SMIC may not in principle be used as a basis for

[4] With respect to apprentices, the 1972 decree of application and the Law of July 1971 on occupational training and apprenticeship provide for a minimum wage reduced to a certain proportion of SMIC. This proportion varies with the length of time the apprentice has been working, from 15 percent for the first six months to 45 percent for months in the fourth semester of employment. These rates are increased by 10 percent when the apprentice reaches age eighteen.

Concerning wage earners under age eighteen, the decree of February 1, 1971, in general fixes the abatement of SMIC at the following rates: 20 percent for those under seventeen and 10 percent for those between seventeen and eighteen. Those reductions must be ended after six months of occupational experience in the same branch of activity. However, the abatements apply only to young hourly wage earners. For those who are paid on a piecework basis, the floors for compensation are the same as those for adults. Wage earners with a reduced physical capacity can be paid as much as 10 percent below SMIC to the extent that their output is below the mean output. In these three cases, the abatements define wage floors, and employer-union agreements can provide higher compensation.

[5] Law of December 23, 1972.

[6] The Law of December 23, 1972, guarantees to full-time workers a minimum monthly compensation obtained by multiplying the hourly SMIC rate by the legal work month. The legislature introduced the idea of a legal workweek equal to forty hours. Beyond this, hours worked must be paid at the higher rate for overtime hours. In no case may the total workweek exceed the legal weekly maximum of forty-eight hours (Labor Code L 2/2–1, L 2/2–2; Decree of May 19, 1939, on the methods of application of the forty-hour week). However, bargaining agreements can establish a maximum workweek below forty-eight hours. These particular arrangements may also be imposed by decree on certain industries or regions. These are, however, exceptions to these rules, which may be granted by the Ministry of Labor to some occupations, for example, the restoration industry. For calculating the monthly SMIC, the legal duration of work is 174 hours per month for those businesses that pay monthly rather than weekly salaries.

indexing other wages, except when the law expressly authorizes such indexation: "It is prohibited that collective bargaining agreements contain clauses indexing on SMIC or references to it with regard to the fixing or revision of wages."[7] Since SMIC itself is indexed on the cost of living, this arrangement is intended to avoid the general indexation of wages on the price index.

Evolution of the Minimum Wage. The evolution of the minimum wage in the period before 1967 differed from that after that date. Whereas in the former period SMIC grew more slowly than other wages on the whole, a rapid catching up began with the 1968 increase of more than 35 percent. In the 1970s the minimum wage grew more rapidly than other wages or the gross domestic product, as shown in figures 1 and 2 and table 1.

Who Is Affected by SMIC? The data on how many workers earn the SMIC are not numerous. They come from two sources. First, the quarterly survey conducted by the Ministry of Labor at the time of a SMIC increase permits an estimate of the number of beneficiaries of these readjustments. The question asked employers is, "How many wage earners benefited from the last SMIC increase, that is, those whose wage rate was below the new SMIC rate before the increase?"

These surveys are limited to commercial and industrial establishments of ten or more wage earners, however. Further, the proportion of wage earners at the SMIC level is much more important as the size of the establishment becomes smaller, as shown in table 2. These surveys thus underestimate the number of "smicards" (those who earn SMIC) by neglecting small establishments.

The annual declarations of wages (DAS), legally required of all employers by the treasury department, provide information on the annual income of wage earners. One can estimate the number of smicards by calculating the annual income of a person who works the average annual hours at the hourly SMIC rate. Nevertheless, those who earn this amount could have received an hourly wage higher than SMIC and have worked fewer hours than the mean. There are also individuals who receive less than the hourly SMIC but work a larger number of hours in a year, such as apprentices.

As shown in table 3, the ratio of smicards to all wage earners fluctuates wildly with the rate of increase of SMIC; there were peaks in 1954–1955 and 1968 and troughs in 1965–1967 and 1972.

[7] Law of January 2, 1970.

FIGURE 1
MEAN HOURLY WAGE, MINIMUM WAGE, RETAIL PRICE INDEX, AND GROSS NATIONAL PRODUCT INDEX, 1950–1979

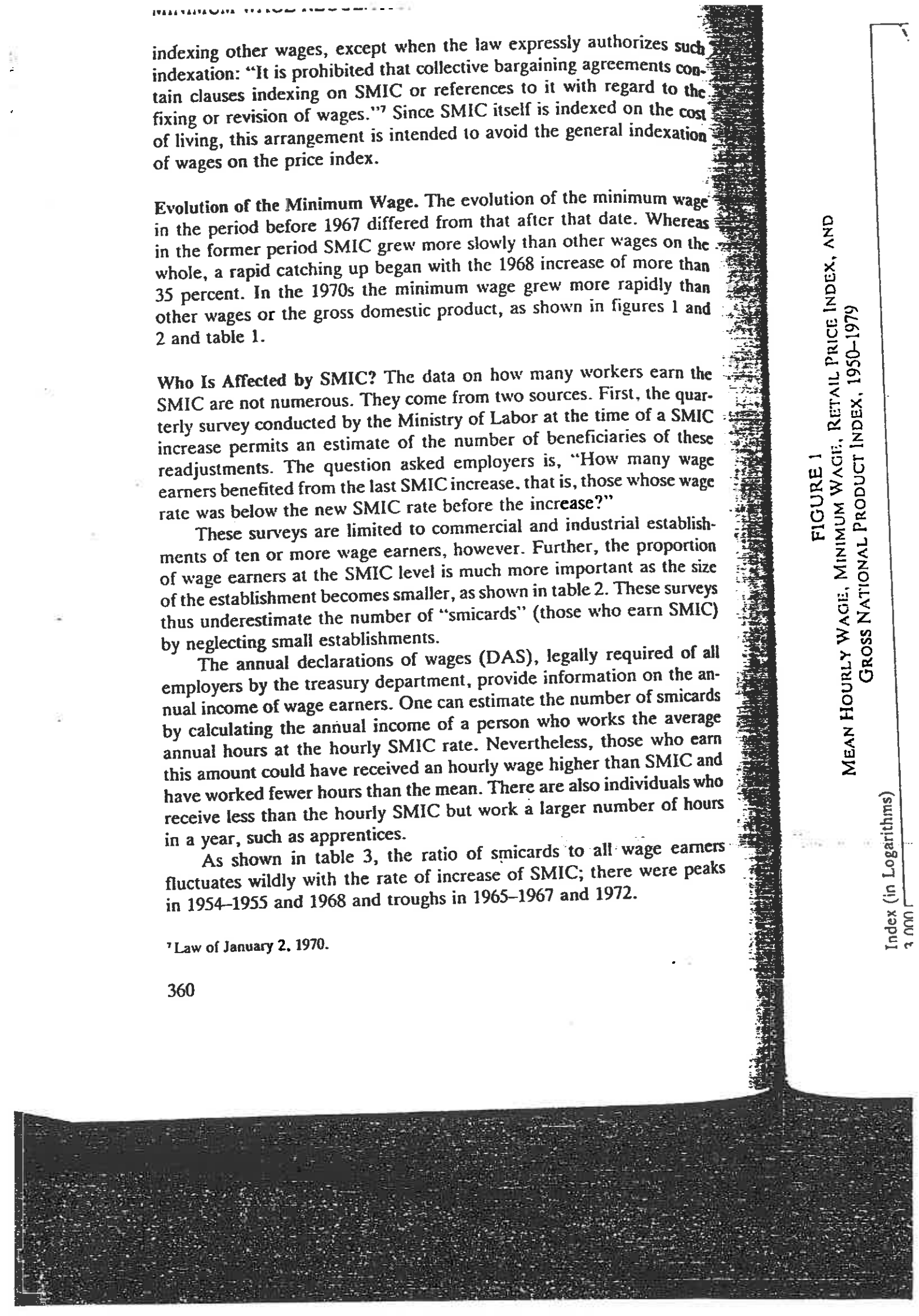
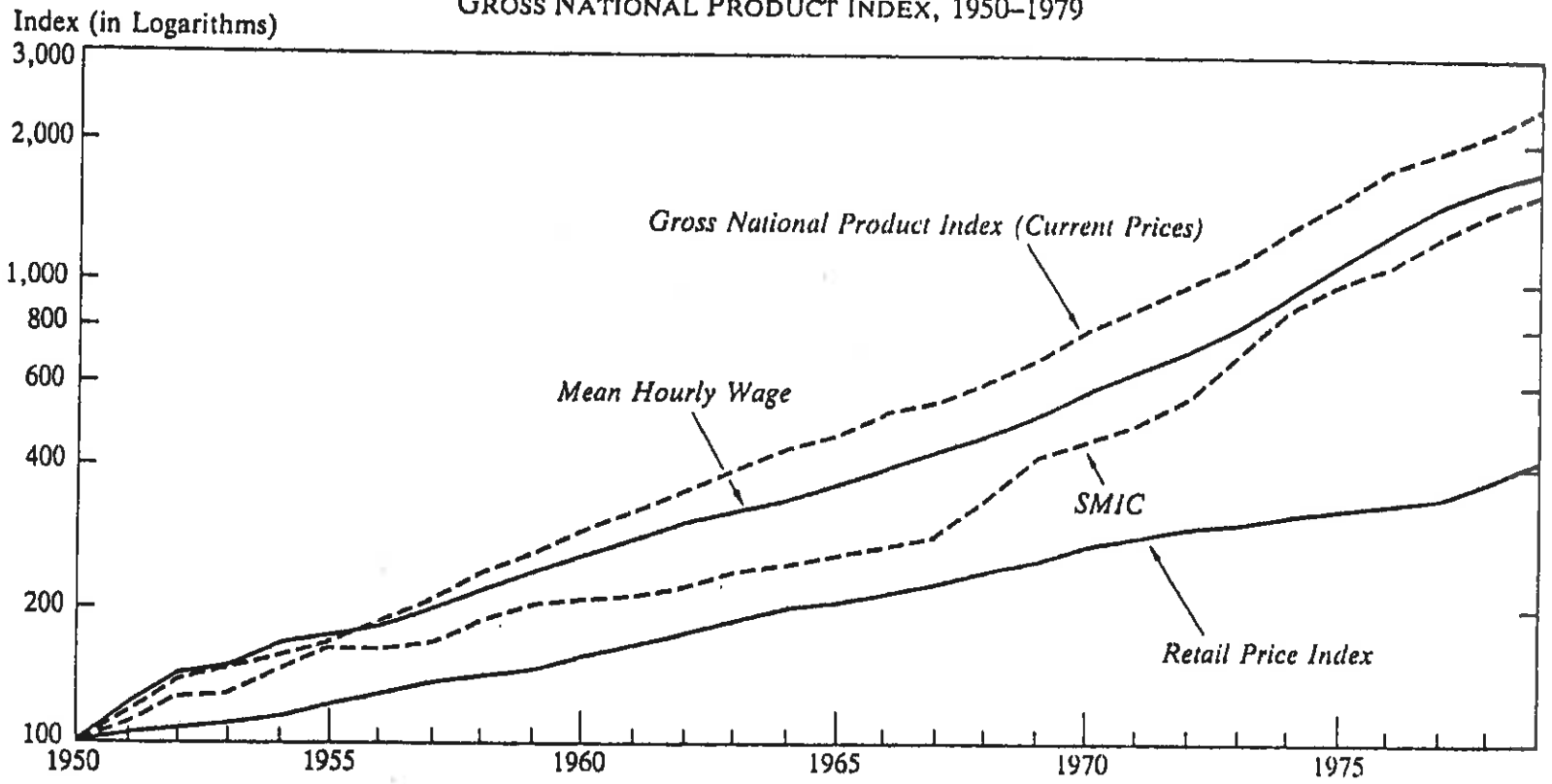
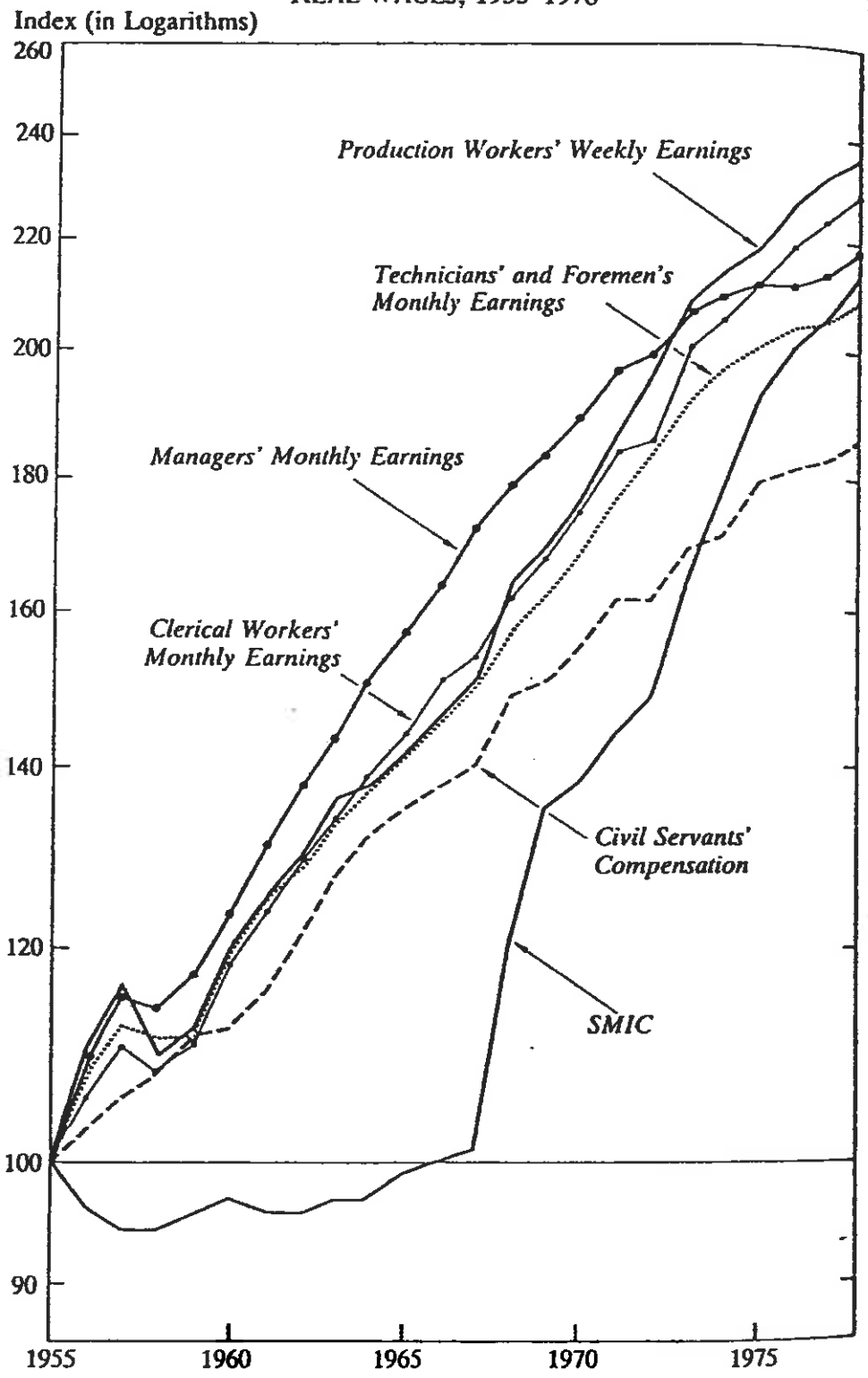


FIGURE 1
MEAN HOURLY WAGE, MINIMUM WAGE, RETAIL PRICE INDEX, AND GROSS NATIONAL PRODUCT INDEX, 1950–1979



SOURCES: *Bulletins Mensuels du Ministère du Travail* (note that the SMIG used here [until 1968] is the unabated one); *Bulletins Mensuels de Statistiques*, INSEE; and *Comptes de la Nation*, INSEE.

FIGURE 2
REAL WAGES, 1955–1978



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[8] Finis Welch, A
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TABLE 1

CHANGES IN AVERAGE WAGE, MINIMUM WAGE, CONSUMER PRICE INDEX, AND GROSS DOMESTIC PRODUCT INDEX, 1950–1979

	SMIC Index	*Nominal GDP Index*	*Average Wage Index*	*Consumer Price Index*
1950	100	100	100	100
1951	112.8	121	122	106
1952	128.2	142.3	142.3	108
1953	128.2	148.1	145.5	111.3
1954	145.6	155.8	165.4	116.8
1955	159.6	167.4	167.3	123.8
1956	161	183.8	181.3	129.9
1957	165.5	207	195.8	137.7
1958	187.8	237	219.3	141.4
1959	200.1	258.2	233.3	145.6
1960	206.4	286.2	248.8	155.7
1961	210.3	312.3	267.6	163.4
1962	220.3	349	290.8	174.8
1963	235.9	391.5	317	183.5
1964	242.3	434	340.2	194.5
1965	252.6	466.8	360.7	204.2
1966	264.1	505.4	382.1	214.4
1967	273.1	545.9	404.2	222.9
1968	343.5	593.2	452.4	231.8
1969	405.1	677.2	500.6	248
1970	438.5	755.4	551.2	262
1971	482.1	842.3	611.3	275.1
1972	531.3	947.6	679.3	291.6
1973	634.6	1,076	774.3	306.1
1974	820.5	1,234	928.4	315.2
1975	968	1,400	1,089	318.3
1976	1,049	1,611.4	1,250	334.2
1977	1,195	1,805.4	1,408	344.2
1978	1,388	2,045.3	1,681	375.4
1979	1,554	2,305.5	1,731	415.8

Consequences of Minimum Wage Legislation

In his recent study *Minimum Wages: Issues and Evidence*, Finis Welch recapitulates various analyses of the economic effects of minimum wage regulations.[8] He shows that these theories are fairly straightforward and

[8] Finis Welch, *Minimum Wages: Issues and Evidence* (Washington, D.C.: American Enterprise Institute, 1978).

TABLE 2

PERCENTAGE OF WAGE EARNERS AT SMIC BY SIZE OF ESTABLISHMENT

Number of Employees	*Oct. 1964*	*Mar. 1965*	*Mar. 1966*	*Jan. 1968*	*June 1968*	*Dec. 1968*	*Apr. 1969*	*Oct. 1969*	*Mar. 1970*	*July 1970*	*July 1971*	*May 1972*
Old data series												
10 to 20	3.5	3.1	2.4	2.5	16.2	6.1	6.9	7.4	5.4	5.3	5.1	3.5
21 to 50	3.2	2.4	1.7	2.0	16.4	5.4	6.4	6.5	5.3	4.6	4.0	2.8
51 to 100	2.1	2.1	1.4	1.9	17.5	4.8	5.9	6.1	4.1	4.1	3.6	2.1
More than 100	0.6	0.6	0.4	0.6	7.2	1.8	2.1	1.8	1.2	2.0	0.9	0.6

Number of Employees	*June 1974*	*July 1975*	*June 1976*	*June 1977*	*June 1977*
Revised data series					
10 to 49	9.2	8	8.7	6.6	6.3
50 to 199	7.8	7.1	6.2	5.2	4.8
200 to 499	5.2	4.3	4.4	4.1	3
More than 500	2.5	2.3	1.4	1.1	1.5

SOURCE: *Suppléments aux Bulletins Mensuels du Ministère du Travail.*

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October 195	
April 1955	
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TABLE 3

EMPLOYEES AFFECTED BY SMIC INCREASES

Date	*Workers Earning SMIC (percent)*	*SMIC Increase (percent)*
October 1954	16	5.7
April 1955	17	3.7
August 1957	6.9	5.9
March 1958	8.1	4
June 1958	7.7	3.1
June 1959	7.6	4.5
November 1959	7.3	2.7
December 1961	3.5	2.9
November 1962	3.7	4.5
October 1964	2	2.5
March 1965	1.6	2
March 1966	1.2	2.1
June 1967	1.4	3.3
June 1968	12.5	35.1
December 1968	3.5	2.7
April 1968	4.4	2.3
October 1969	4.3	3.8
March 1970	3.2	2.8
July 1970	3.6	4.2
July 1971	2.6	4.6
May 1972	1.7	4.1
November 1972	2.7	5.8
July 1974	5.8	7.6
July 1975	5.4	6
July 1976	5.1	6.2
July 1977	4.1	2.6
July 1978	3.8	3.8

SOURCE: *Suppléments aux Bulletins Mensuels du Ministère du Travail.*

that a wide agreement on them has developed among economists. Let us repeat his principal conclusions.

When the minimum wage is fixed by regulation above the equilibrium level of the labor market, the quantity of labor supplied exceeds the quantity demanded, and employment is reduced. Those workers who keep their jobs at the regulation wage rate are subsidized by those whose jobs have been ended because of the increase in that wage.[9]

[9] G. J. Stigler, "The Economics of Minimum Wage Legislation," *American Economic Review*, June 1946.

The regulation, however, affects just the money wage, which constitutes only one aspect of the remuneration for work. When we take account of the other terms and conditions of employment, we can expect employers to maintain a constant total compensation by reducing nonwage benefits to offset the increased money wage. This adjustment may equally affect on-the-job training in the firm.

Moreover, the location of employment has various advantages and disadvantages for wage earners. Certain work environments constitute pleasant working conditions and lead to compensating wage reductions. Thus in France there exists a negative wage premium for workers of equal qualification in the Midi relative to the north. In addition, a firm has an interest in locating in those regions where wage premiums are negative. A uniform increase in money wages moves firms toward choosing a location independently of the preferences of its workers and closer to places preferred by consumers. Instead of firms moving toward workers, it is workers who must move toward firms. The 1968 termination of the regional differences in SMIC must have had such an effect.

Welch also restates the minimum wage consequences for part-time workers. To the extent that the cost of part-time work is increased more than that of full-time work, a firm will substitute full-time for part-time workers. This effect will be clearer when the minimum wage is regulated on a monthly, rather than an hourly, basis. Finally, increases in SMIC discourage businesses from taking on apprentices; however, the French minimum wage is lower for youths under eighteen for the first six months of a job.

The effect of SMIC on unemployment is ambiguous in theory. A simple analysis of the problem shows that it reduces employment, but the diminution of job offers by business does not create an equivalent number of unemployed. The smicards lucky enough to keep their jobs have an incentive to reduce their mobility. Those who do not find employment may be discouraged and drop out of the labor force. On the other hand, a higher minimum wage encourages new entrants to try their luck at looking for work. Paradoxically, those who have the most to gain, that is, those who have the lowest productivity, are encouraged to search the longest. If the productivity of applicants is identical, employers have a margin of discretion for choosing among applicants: SMIC promotes discrimination on criteria other than economic efficiency. When jobs are not homogeneous, SMIC reduces the relative demand for less productive labor and increases that for more productive labor.

Concerning the effects on other wages—ripple effects—Welch emphasizes that an increase in the minimum wage does not necessarily lead to an increase of all wages, which would maintain the hierarchy, or

structure, of wages unchanged; nor does it necessarily have a stronger effect on the wages closest to the minimum. It drives firms to demand more of the qualifications that are most easily substitutable for those of the smicards. It drives consumers to switch from products with a large unskilled labor content toward products with a large skilled labor or capital content. The ripple effect of SMIC on other wages points to the beginning of these substitutions. If they did not take place, there would be no ripple effect, and cost of products would be higher.

The analysis of incomplete minimum wage coverage hardly applies to France's SMIC. What comes closest is the difference between SMAG in agriculture and SMIG in the other industries. We will not deal with this aspect of the problem, except to point out that SMIC exerts differential effects according to industry since the employment of youths and of less qualified workers varies considerably from one industry to another.

Let us now briefly review some scholarly work done since Welch. Welch reminds us that "Pure theory is clean and neat, and abstraction is at a premium. The theory can be developed as though there is an initial equilibrium that is shocked by imposing a minimum, and nothing else in the initial situation has changed."[10] But he does not cite the arguments of institutional economists in favor of the shock: when the employer possesses monopsony power, it is possible that a minimum wage increases employment rather than reducing it. Second, a minimum wage might have a positive effect on productivity and compensate for the predicted reduction of employment in a competitive labor market. E. G. West and M. McKee reexamine these arguments and conclude that all the empirical evidence available in 1979 shows that the minimum wage significantly decreases employment, which leads to the conclusion that employer monopsony power is exceedingly rare.[11] The reduction of employment also shows that all wage earners do not benefit from SMIC and that even if there is a positive effect on productivity, it is not sufficient to compensate for the negative effect on employment.

Keith Leffler maintains that the minimum wage does not reduce the well-being of low-wage workers, especially young workers, if there is unemployment insurance.[12] Instead, it creates a transfer from the unemployment insurance contributors to the low-wage workers. It further accelerates turnover in the labor market. An analysis by J. Huston McCulloch shows that the minimum wage may increase the equality of

[10] Welch, *Minimum Wages*, p. 21.

[11] E. G. West and M. McKee, "Monopsony and 'Shock' Arguments for Minimum Wages," *Southern Economic Journal*, January 1980.

[12] Keith B. Leffler, "Minimum Wages, Welfare, and Wealth Transfers to the Poor," *Journal of Law and Economics*, October 1978.

the distribution of income, as measured by the Gini coefficient, if there is unemployment insurance.[13] On the other hand, the minimum wage increases inequality if there is no such insurance. These new analyses cast doubt on the interpretation of the minimum wage as a tax from the poor to the poor.

In another connection Robert E. Hall asserts that the minimum wage does not create an excess supply of young workers on the labor market.[14] According to Hall, the principal effect of the minimum wage is to increase turnover rather than to make it more difficult to be hired. He does not consider the compensating impact on the welfare of the young implicit in their receiving unemployment insurance, but he emphasizes the loss of efficiency in the allocation of resources resulting from excessive turnover and from the instability of young workers, a well-known characteristic of the contemporary American labor market.

Another hypothesis was recently examined by J. Mincer and L. Leighton: the minimum wage increase discourages human capital formation in the firm. The authors conclude that this hypothesis is largely confirmed by empirical analysis.[15]

Finally, a recent dissertation by David M. Luskin reexamines the effects of the minimum wage on working conditions, fringe benefits, and part-time work and concludes that there is no convincing evidence of the first point but there is confirmation that a minimum wage reduces firms' demand for part-time workers.[16]

Recent works give a more complex and subtle theoretical analysis of the economic effects of the minimum wage: it seems possible that the combined system of SMIC and unemployment insurance increases money transfers to the young and less qualified, but at the price of increased employment instability, a reduction in occupational training, and a detriment to wage earners seeking part-time work.

From the perspective of these works, it is interesting to report that various French public sector interventions have sought to stimulate firms to train young wage earners better, to hire more young workers, and to promote part-time work in a period when SMIC was catching up to the mean wage and unemployment insurance was spreading.

Unfortunately, it is difficult to test these effects empirically in the

[13] J. Huston McCulloch, *The Effect of Minimum Wage Legislation on Income Equality: A Theoretical Analysis*, National Bureau of Economic Research Working Paper no. 171 (New York, 1977).

[14] Robert E. Hall, "The Minimum Wage and Job Turnover in Markets for Young Workers," mimeographed, April 1979.

[15] J. Mincer and L. Leighton, *Effects of Minimum Wages on Human Capital Formation*, National Bureau of Economic Research Working Paper no. 441 (New York, 1980).

[16] David M. Luskin, "The Economics of Minimum Wage Laws" (Ph.D. diss., University of Rochester, 1979).

French economy because of the paucity of statistical data on terms and conditions of employment, the duration of employment, the turnover of young workers, and on-the-job training. The descriptive data we have seem to show that this segment of the market exhibits a trend toward reduced on-the-job training even though various legislation provides subsidies to firms that provide such training. But no rigorous test can yet be performed.

Thus we will content ourselves, in the empirical part of this paper, with testing the most classic effects of SMIC on the employment of young workers, on their rate of participation, and on the ripple effects on other wages.

Empirical Results

There are practically no empirical studies of the effects of SMIC in France.[17] A recent article by Jean Bégué is devoted to the assessment of ripple effects of SMIC on other wages.[18] The author is exclusively interested in "immediate" effects and excludes "deferred" effects, whether they are subsequent wage movements reestablishing the preexisting hierarchy or effects induced by extrawage variables that react immediately to the wage increase. Because of the growth of manpower costs, for example, prices can rise and lead to new increases in wages. Finally, the author works exclusively with the wage bill at constant total employment, that is, with the mean wage.

The author's method consists of a graphic presentation of an arbitrary relation between the level of SMIC after increases and the distribution of wages as it was before the change in SMIC. This comes from assuming that wages at the upper end of the hierarchy remain unchanged while wages near SMIC are raised by a proportion chosen by the author. Similarly, the choice of the wages that are affected by the SMIC increase is not explained. That is, the conclusion reached by the article that "we estimate 6.7% as the percentage increase in the wage bill which, under certain hypotheses, would have directly resulted from fixing SMIC at 2,400 Frs gross per month, based on 40 hours per week" is worth no more than the hypothesis in question. It is purely arbitrary.

In what follows, we present some classic estimates of the effects of

[17] In his monograph *Le salaire minimum* (Paris: Presses Universitaires de France, Que sais-je?, 1978), Jean-Paul Courthéoux is satisfied with describing the administrative structure of SMIC and analyzes none of its effects. His bibliography cites no studies of these effects.

[18] Jean Bégué, "Hausse du SMIC et effets sur la masse salariale," *Economie et Statistique*, no. 100, May 1978.

SMIC, such as those found in the literature previously cited. They tend to shed light on the consequences of variation in SMIC relative to the mean level of wages on the employment and participation of young workers in the labor market as well as on the possible ripple effects on the mean level of wages.

The Effect on Youth Employment. Two equations are tested. One of these has as its dependent variable the employment of youths relative to that of adults, which conforms to the tests of Welch.[19] The variable is defined as the ratio of the number of young persons fifteen to twenty-four who have a job to the number of employed persons twenty-five to sixty years old.

Theory predicts that the higher SMIC is raised relative to the mean wage, the more the employment of youths will be reduced relative to that of adults, thus giving rise to discrimination against the young. The SMIC is not the only variable to influence the rate of youth unemployment, and we can measure the degree of stability of this employment by introducing a business cycle variable, such as the unemployment rate of adult males.

The results in table 4 show that increases in SMIC relative to the mean salary significantly reduce the employment of fifteen- to twenty-four-year-olds relative to that of twenty-five- to sixty-year-olds. Using the logarithmic specification of all variables, we report that a 1 percent increase in the SMIC/mean wage ratio reduces by 0.46 percent the relative employment of the young. In addition, a 1 percent increase in the unemployment rate of adult males reduces by 0.12 percent the relative employment of young persons.

These effects are much stronger and more significant for young men than for young women. For the latter the effect of SMIC is insignificant, and the ratio of the employment of young women to adult women appears to be insensitive to the business cycle. This does not mean, however, that female employment might be insensitive to the cycle, as we will soon see.

Indeed, another method of studying the impact of SMIC on youth employment is to take as our dependent variable the rate of employment of the young, that is, the ratio of employed persons fifteen to twenty-four to the total population of fifteen- to twenty-four-year-olds.

Table 4 shows that the rate of youth employment is very significantly affected by the level of SMIC relative to the mean salary. This is equally true of the rate of employment of young women. On the other hand, the rate of employment is not strongly cyclic, but it is more so for young

[19] Welch, *Minimum Wages*.

TABLE 4

THE IMPACT OF SMIC ON RELATIVE EMPLOYMENT, EMPLOYMENT RATE, AND PARTICIPATION OF THE YOUNG
(annual data, 1963–1979)

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THE IMPACT OF SMIC ON RELATIVE EMPLOYMENT, EMPLOYMENT RATE, AND PARTICIPATION OF THE YOUNG
(annual data, 1963–1979)

Equation Number	*Dependent Variable*	*Constant*	LSMIC	LMIL	LPJ	LUA	R^2	*DW*
1	LERJ	−4.12	−0.46	—	—	−0.12	0.76	0.41
		(−3.82)	(−1.65)			(−2.68)		
2	LERJM	−5.85	−0.68	—	—	−0.15	0.87	0.76
		(−6.12)	(−2.77)			(−3.65)		
3	LERJF	−3.48	−0.17	—	—	−0.95 E–01	0.41	1.00
		(−2.45)	(−0.48)			(−1.51)		
4	LTEJ	−2.57	−0.41	0.11	−0.22	−0.85 E–01	0.96	1.15
		(−3.63)	(−3.84)	(2.33)	(−1.19)	(−4.04)		
5	LTEJM	−3.14	−0.61	0.91 E–01	−0.57	−0.10	0.95	1.00
		(−2.95)	(−3.73)	(1.22)	(−2.02)	(−3.35)		
6	LTEJF	−3.44	−0.17	0.14	0.22	−0.59 E–01	0.93	0.96
		(−5.24)	(−1.74)	(3.21)	(1.31)	(−3.03)		
7	LTPJ	−1.42	−0.41	0.58 E–01	−0.50	−0.40 E–01	0.95	1.00
		(−2.04)	(−3.85)	(1.18)	(−2.73)	(−1.97)		
8	LTPJM	−2.36	−0.61	0.50 E–01	−0.96	−0.72 E–01	0.95	1.07
		(−2.25)	(−3.80)	(0.68)	(−2.76)	(−2.93)		
9	LTPJF	−1.89	−0.16	0.70 E–01	−0.15	−0.39 E–01	0.82	0.91
		(−2.87)	(−1.61)	(1.51)	(−0.19)	(−0.19)		

NOTE: Number of observations, 17; *t*-statistics in parentheses; significance levels are $t_{01} = 2.76$, $t_{05} = 2.05$, and $t_{10} = 1.70$. For definitions of variables, see appendix.

males than for young females. The demographic variables (*JP*) and the number of draftees called (*MIL*) exert only a small influence. We still note a positive influence of the number of draftees on the rate of employment of young women as well as of young men.

The Effect on the Participation Rate of the Young. While the effect of SMIC on the employment of the young is well determined in theory, the effect on participation is ambiguous because there is a negative effect on employment and a possibly positive effect on unemployment. The explanation for the latter is either that the higher SMIC attracts a larger number of youths into the labor market to search for employment or that the increase in SMIC accelerates the turnover of young employed workers, which increases the unemployment rate.[20]

In view of the results of table 4, it appears that an increase in SMIC reduces the participation rate of the young, that is, that the effect on employment is stronger than the effect on unemployment. This is true for the group of young workers as a whole and for young men, but the effect is less strong and less significant for young women. This result is consistent with what we know about the strong rise in the unemployment rate of the young in the 1970s when SMIC grew faster than the mean wage and the decrease in participation of young men and increase in participation of young women.

Summary of Table 4. The results of table 4 strongly support the classic predictions of economic theory concerning the effect of SMIC on young people's employment. Equations 1 through 3 show a clear effect of SMIC increases relative to the mean wage on the relative employment of young men, the very cyclical character of their employment (coefficient on *LUA*, male unemployment), and no clear effect of SMIC on the relative employment of young women. Equations 4 through 6 show that the same results as those for relative employment are obtained when the employment rate is used as the dependent variable. Again, the effect on young men is clear and more important than that on young

[20] Equations (4) and (7) jointly give an implicit estimate of the impact on youths' unemployment rate of a variation in the SMIC/mean wage ratio. The elasticity of unemployment to the variation of this ratio can be expressed as:

$$E_U \frac{SMIC}{W} = (\beta_{TPJ} - \beta_{TEJ}) \frac{EIPA}{UIPA}$$

where β_{TEJ} is the regression coefficient of *LSMIC* in the employment equation (4) and β_{TPJ} is the regression coefficient of *SMIC* in the participation equation (7). *EIPA* is the employment rate, and *UIPA* is the unemployment rate. It can be seen that $\beta_{TPJ} = \beta_{TEJ} = -0.41$ in both equations. Thus an increase of SMIC relative to the mean salary does not affect the unemployment rate of the young.

TABLE 5

THE RIPPLE EFFECTS OF SMIC ON WAGES: TENTATIVE RESULTS
(quarterly data, 1962–1979)

Equation Number	Dependent Variable	Constant	DP	DP_{t-1}	DSP	DSP_{t-1}	UA	UA_{t-1}	UA_{t-2}	UA_{t-3}	$DPIB$	$DPIB_{t-1}$	R^2	DW
1	DW	0.84 E–02 (3.52)	−0.33 (−2.53)	0.21 (1.69)	0.22 (7.71)	0.60 E–01 (2.05)	—	—	—	—	0.11 (2.99)	−0.98 E–01 (−2.49)	0.69	2.33
2	DW	−0.46 E–02 (−0.47)	−0.24	—	0.27 (7.58)	—	0.45 (0.30)	0.64 (0.30)	−0.55 (−0.26)	0.22 (0.17)	0.48 E–01 (1.42)	—	0.57	2.45

NOTE: Number of observations, 17; t-statistics in parentheses; significance levels are $t_{01} = 2.76$, $t_{05} = 2.05$, and $t_{10} = 1.70$. For definitions of variables, see appendix.

women. Finally, equations 7 through 9 demonstrate that the participation rate of young men, more than that of young women, is reduced by increases in SMIC relative to the mean wage and that there are weak cyclical effects on participation.

Ripple Effects. Despite the legal prohibition against wages being indexed on SMIC, can we observe an effect of SMIC increases on the mean salary? Table 5 shows that SMIC exerts a positive and very significant effect on the rate of increase of the mean salary. This effect occurs for the most part during the quarter of the SMIC increase. There is thus a de facto indexation, at least partially, which reflects the resistance of the hierarchy of wages to being squeezed from below.

Conclusion

The SMIC significantly reduces the employment and participation of the young, especially of young men more than of young women. On the other hand, it is possible that it gives rise to a strong increase in the unemployment rate of young women. These results are strongly in agreement with what has been found for other countries.

Concerning young men, for whom the unemployment effect is more doubtful, there appears to be less confirmation of Leffler's finding—that SMIC can increase the income of the young and less qualified when there is an unemployment system—since participation of young men in the labor market has been steadily decreasing in the last few years. It could, however, affect young women, whose participation has been increasing.

In sum, the social character of SMIC appears at least dubious.

Appendix: Definition of Variables

SMIC: Nominal hourly SMIC divided by the general index of hourly wages (*W*)
SP: Real hourly SMIC, that is, SMIC divided by the price index
UA: Rate of unemployment of adults (twenty-five- to sixty-year-olds)
PIB: Gross domestic product at 1970 prices
W: General index of nominal hourly wages
P: Consumer price index
MIL: Ratio of draftees to total number of young people (fifteen- to twenty-four-year-olds)

JP: Ratio of fifteen- to twenty-four-year-olds to total population
EJ: Number of fifteen- to twenty-four-year-olds employed
EJM: Number of fifteen- to twenty-four-year-old males employed
EJF: Number of fifteen- to twenty-four-year-old females employed
ERJ: Relative employment of the young, that is, *EJ* divided by total number of twenty-five- to sixty-year-olds employed
ERJM: Relative employment of young males, that is, *EJM* divided by total number of twenty-five- to sixty-year-old males employed
ERJF: Relative employment of young females, that is, *EJF* divided by total number of twenty-five- to sixty-year-old females employed
TEJ: Employment rate of the young, that is, *EJ* divided by total population of fifteen- to twenty-four-year-olds
TEJM: Employment rate of young males
TEJF: Employment rate of young females
TPJ: Participation rate of the young, that is, unemployed and employed fifteen- to twenty-four-year-olds divided by total population of fifteen- to twenty-four-year-olds
TPJM: Participation rate of young males
TPJF: Participation rate of young females
L means the logarithm of the concerned variable.
D means the rate of growth of the concerned variable.

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