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# Reducing Wage Inequalities Between Men and Women

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The average monthly wage income of women in France today is some 24.5% lower than that of their male counterparts. Such gender-related wage inequalities can be explained by two primary factors, these being working hours and occupational segregation.

Women work fewer hours per month and also experience more interruptions in their careers, the majority of which relate to their family situation. Part-time working has a direct effect on income through a lower number of hours worked, but also due to the lower hourly wage of part-time work, a penalty that increases over the course of the individual's career, particularly when the latter is fragmented. Part-time working is responsible for a monthly wage gap of around 11% between men and women.

The gender-related distribution of education, professions and positions, meanwhile, results in a wage gap of around 7% between men and women, in addition to the effects of fragmented and part-time working. Women are, in fact, over-represented both in relatively low-paid sectors and jobs and at lower hierarchical levels. This dual segregation may reflect a deliberate choice on their part, but this choice is also influenced by the prevalence of gender-related stereotypes, which can drive women to look towards positions with less restrictive hours and less risky prospects, but which are less well paid on average, and also to place less importance on competition and negotiation, both of which are conducive to promotion. Whilst it is essential that individual preferences be respected, it is also important, in the name of social justice and economic efficiency, to aim to modify the social constructs that result in gender-differentiated choices.

Public policies designed to sustainably reduce gender inequalities in the labour market must tackle the causes of such inequalities and not merely limit themselves to passing legislation that underline the equality of women and men in the eyes of the law.

The primary avenue of public action relates to the way in which the cost of non-commercial productive activities (such as childcare and caring for elderly dependants) is borne between the community and the different members of the household. The present *Note* suggests developing the collective care of children and elderly dependants, reforming the distribution and remuneration of parental leave in an attempt to promote a more even distribution between the parents and reforming the joint income tax system, which, in some cases, reduces the incentive for the 'second' partner in the relationship to enter the labour market.

The second avenue aims to fight the stereotypes that govern education and career choices by means of increasing awareness among pupils, parents and teachers alike. The impact of quotas is unclear, and the *Note* recommends that they continue to be applied with restraint.



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Women receive lower income levels than do men, in terms of both earned income and retirement pensions. In 2010, a woman's full-time hourly wage was on average 16% lower than a man's, with this gap widening to 24% in terms of annual wage income, which is directly affected by working hours (*cf.* table).

**Work-related inequalities**

| | Women | Men | Gap |
|---|---|---|---|
| Average net hourly wage[a b] | | | |
| • full-time employees | 12.64 | 14.99 | – 16% |
| • part-time employees | 11.13 | 13.76 | – 19% |
| reduction in hourly wage associated with part-time work | – 12% | – 8% | – 4[c] |
| Average annual earned income[b d] | 17,376 | 23,004 | – 24% |
| Labour force participation rate among 16-64-year-olds[d] | 67 | 76 | – 9[c] |
| Proportion of part-time workers[d] | 26.7 | 6.0 | + 20.7[c] |
| Proportion of forced part-time workers[d] | 8.5 | 2.6 | + 5.9[c] |
| Time devoted to productive activities[a e] | 6h31 | 6h19 | + 0h12 |
| Proportion of professional activities[a] | 39% | 60% | – 21[c] |

*Notes*: [a]In 2010; [b]In euros; [c]Percentage point, measuring the difference between two ratios; [d]In 2012; [e]The INSEE uses the term 'productive activities' to refer to professional time (paid work, travel and training) and time devoted to domestic work (housework, cooking, grocery shopping, raising children, DIY and any care provided for other dependents for such activities).

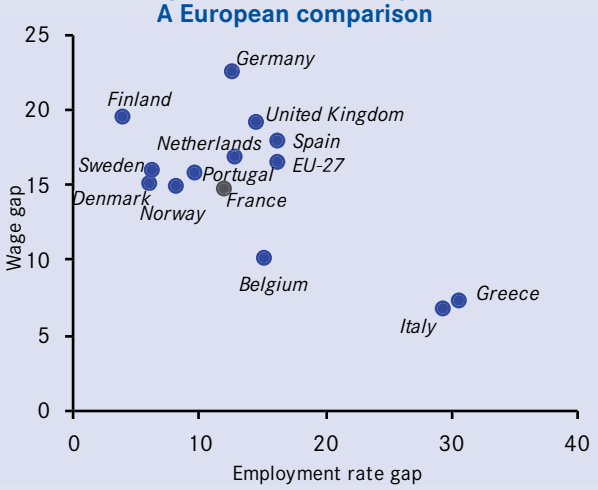
*Sources*: INSEE, *Employment Survey 2012* and DADS 2010 ; *Regards sur la Parité*, 2012.

The table shows that women have a lower rate of labour force participation and that they are more likely to work part-time. Part-time working penalises them in two respects. Firstly, it means that they work fewer hours over the course of the month or year. Secondly, each hour worked is less well paid for a part-time employee than for a full-time worker. This reduction associated with part-time working, which affects women more than it does men, can be partially explained by a structural effect, since part-time jobs are more likely to be low-skilled jobs. However, there is also a specific reduction relating to part-time working (see below).

Men and woman, however, devote around the same amount of time every day to 'productive activities', but the distribution between professional time and domestic time differs greatly between the sexes, with women devoting 39% of their time to professional activities and men 60%. This difference, which has a significant impact on women's incomes, stems from the amount of domestic work, that is, non-market and unpaid, that they do.

The following graph compares gender inequalities in France and other European countries. These comparisons should be interpreted with care since differences between countries are greatly influenced by labour market participation rates among women; average qualification levels among women are higher in those countries where low-skilled women are less active, which automatically results in a higher average salary among women in such countries. With this in mind, countries such as Italy and Greece, where labour force participation rates among women are far lower than among men, appear to have smaller wage gaps than the Scandinavian countries, where far more women participate in the labour market.

**Inequalities in the workplace: A European comparison**




*Interpretation*: Gross average hourly wage for the entire wage-earning population excluding the civil service, full-time workers; data for 2012, with the exception of Greece, 2010. Rate of employment calculated for the population between 20 and 64 years of age; data for 2012. The wage gap is the difference between men and women as a % of men's wage. The employment gap is the difference between the rates of employment of men and women as a % of the rate of employment among men.

*Source*: Eurostat.

Having taken the necessary care in interpreting the results, it becomes clear that France performs far better than the United Kingdom, Spain and Germany since the hourly wage gap is lower in France, despite the fact that the employment rate gap is similar or lower. With regards to employment rates, however, France performs distinctly less well than the Nordic countries (Norway, Sweden and Denmark), where gender-related labour market participation gaps are distinctly lower than in France.

The decades since the 1950s have witnessed the slow convergence of and labour force participation rates of women and men; yet this convergence has failed to eradicate inequalities. Moreover, wage convergence between men and women has ceased since the 1990s.[1]

The present *Note* looks at the factors that explain why such inequalities remain and offers a number of avenues of action designed to sustainably reduce them.

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[1] The earned income gap was 24% in 2012 and fluctuated between 22% and 24% over the 1990-2002 period; see Meurs D. and S. Ponthieux (2006): "L'écart des salaires entre les femmes et les hommes peut-il encore baisser ?", *Économie et Statistique*, no 398-399.

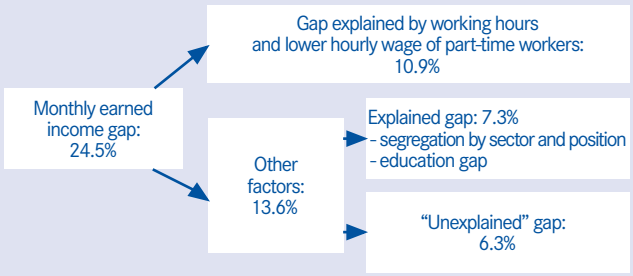
## Persistent factors in wage inequality

In order to properly understand the wage inequalities that exist between women and men, it is essential to isolate inequalities related to their productive characteristics (level of education, experience, seniority, etc.) and to the specifics of the positions held (working hours, part-time working, title, sector, professional category, etc.). Econometric analysis helps quantify the effects of these 'observable' factors and to consequently isolate any 'unexplained' component, which is then interpreted as the difference in the hourly wage of a man and a woman *who would have the same observed productive characteristics and hold the same type of position.* As we will see later on, this 'unexplained' component of inequality cannot be directly linked to discrimination.

### An analysis of wage inequalities in 2012

In France, in 2012, the average monthly wage gap between men and women was 24.5%; a little less than half of this difference (10.9%) stemmed from the fact that women worked fewer hours and the effects of part-time working (*cf.* following figure); the remainder (13.6%) can be explained in part by the observed characteristics of the individual (education, experience, etc.) and the position (socio-professional category, role, sector, etc.), to which 7.3 points of the differences is attributed. The remaining 6.3%, that is, just over a quarter of the total, corresponds to the 'unexplained' element.[2]

**Breakdown of the earned income gap between men and women**




*Note*: Authors' estimations (see online appendix for further details: www.cae-eco.fr).

*Sources*: Employment Survey 2012, INSEE.

One possible interpretation of the 'unexplained' component of the wage gap is the presence of a certain discrimination against women, defined as paying a different wage to two individuals with the same productive capacities and the same type of position, but of different genders. Such an interpretation is not, however, justified, since the statistical series available do not assess all of the productive characteristics of the individual. With this in mind, the 'unexplained' component of the wage gap may stem from unobserved variables (flexitime working, the responsibilities undertaken by the individual, etc.), which might prove to be relevant factors in order to reflect the heterogeneity of individuals.[3] True wage discrimination against women is far more difficult to bring to light (see inset 1).

The analysis shown here relates to average wages. It must be expanded upon by examining income differences between men and women right throughout the wage distribution. In the case of France, it would appear that observed characteristics alone explain the entire gender-related wage gap for wages in the bottom 20% of the distribution.[4] Indeed, at the lower end of the distribution, workers are almost entirely paid at the minimum wage level; wages vary according to working hours, part-time working and the position held, with no unexplained remainder (and therefore no discrimination other than that relating to education, the gender division of professions and working time). With regards to wages at the higher end of the distribution, however, there is indeed an unexplained element that needs to be interpreted.

Education is the only factor that works in favour of women: women's higher education levels imply an average wage that is 1% higher than that of men. These results closely reflect the situation observed in other European countries. Indeed, the number of years girls spend studying and the results they achieve are now greater than those of boys. The gap is particularly significant when comparing college-level enrolment rates, which stand at 33% for girls and 27% for boys.[5] This significant adjustment in terms of level of education has been a key factor in reducing wage inequalities between women and men since the 1960s.

Conversely, significant differences remain in terms of working hours and the gender-related distribution of professions and positions held. The reduction in the labour force participation gender gap, which dropped from 40 percentage points in 1960 to 9 points in 2012, brought with it a significant increase in part-time work among women.[6] The gender-

[2] It should be noted that wage gaps, and the breakdown thereof, have been stable since the 1990s: in 1990, 2002 and 2012 the earned income gap exceeded 20%, slightly over 10 points of which were due to differences in working hours between men and women and around 7 points of which were the result of occupational segregation (see appendix at www.cae-eco.fr).

[3] Neither Shatnawi D., R. Oaxaca and M. Ransom (2014): "Movin'on Up: Hierarchical Occupational Segmentation and Gender Wage Gaps", *Journal of Economic Inequality*, yet to be published, nor Crépon B., N. Deniau and S. Pérez-Duarte (2003): "Wages, Productivity and Worker Characteristics: A French Perspective", *CREST Working Paper*, no 2003-04, find any evidence of wage discrimination where the data is sufficiently specific.

[4] Breunig R. and S. Rospabe (2013): "Distribution of French Gender Wage Gap", *Australian Journal of Labour Economics*, vol. 16, no 1, pp. 155-199.

[5] *Regards sur la Parité* (2012), figures for 2010.

[6] Bordes M. and D. Guillemot (1994): "Marché du travail – Séries longues", *INSEE Résultats Emploi-Revenus*, no 62-63, May.

## 1. Measuring discrimination

Accurately measuring discrimination is an arduous task since it requires a comparison to be drawn between the salaries of individuals who have exactly the same levels of productivity and have made the same choices.

Direct measurements of discrimination have focused primarily on hiring and promotion, and two approaches have been used to try to measure discrimination. The first of these, the so-called testing method, involves sending employers two false CVs that are equivalent in all respects other than the gender and ethnic origin of the applicant. In the case of France, this type of study shows that gender does not have a significant impact on the likelihood of the individual being selected for an interview, with the exception of young women without children, who appear to be less likely to be called for an interview[a].

Another approach involves focusing on small samples for which very precise, accurate information is available. One study, for example, looks at the impact of recruitment auditions held by a number of major American orchestras in the 1970s and 1980s where the auditions were performed behind a screen that concealed the candidate's gender[b]. This system appears to have led to a significant increase in the number of women being hired and promoted, thus demonstrating the prevalence of discrimination against them. It is, however, difficult to bring to light this type of discriminatory attitude in more recent situations. In France, for example, data on competitive examinations for positions in the economic sciences higher education sphere reveals no significant differences between the success rates achieved by men and those achieved by women, once the works published by the candidates have been taken into account[c].

[a] See Petit P. (2004): "Discrimination à l'embauche : une étude d'audit par couples dans le secteur financier", *Revue Économique*, vol. 55, no 3, pp. 11-621. Bertrand M. and S. Mullainathan (2004): "Are Emily and Greg more Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination", *American Economic Review*, vol. 94, no 4, pp. 991-1013, find no difference between the sexes.

[b] Rouse C. and C. Goldin (2000): "Orchestrating Impartiality: The Impact of 'Blind' Auditions on Female Musicians", *American Economic Review*, vol. 90, no 4, pp. 715-741.

[c] See Bosquet C., P.P. Combes and C. García-Peñalosa (2013): "Gender and Competition: Evidence from Academic Promotions in France", *CEPR Discussion Paper*, no 9711.

mix within occupations, meanwhile, has increased slightly since the 1960s, although not uniformly. Care-giving positions continue to be occupied almost exclusively by women, whilst the vast majority of those in the construction industry are held by men. An increasing number of women are, however, occupying skilled positions such as doctors, engineers and technical executives.[7]

> **Observation 1.** The differences in wage observed between women and men in 2012 (24.5%) are primarily due to differences in working hours (10.9%), followed by the gender-related distribution of professions and positions held (7.3%). These are, in fact, the two primary –and persistent– factors in wage gaps between men and women.

### The key role of working hours

Given that working hours are the main cause of income inequalities between women and men, it is important to understand the factors that determine them.

#### Paid activity and unpaid activity

Whilst women may work as many hours as men, the proportion of their domestic work, that is, non-market l and unpaid, is far greater (*cf.* inset 2). As a result, women tend to be less active –in terms of professional activity– and to work fewer paid hours when they are active; 27% of women, for example, work part-time as opposed to only 6% of men (*cf.* table, p.2), of which 8.5% and 2.6% is involuntary part-time work for women and men respectively.

Labour force participation and part-time working among women are heavily influenced by their family situation, which is not the case with men; the labour force participation rate among women living with their partner and with three children, including at least one under the age of 3, drops to 42.8%, as opposed to a level of 79.8% observed among women with a single child, also under the age of 3, and 73.4% for women whose children are over three years of age.[8] Similarly, there is a strong correlation between part-time working among women and raising children. Consequently, women who are in a relationship but have no children are far less likely to work part-time than the average woman in a relationship.

Whilst labour force participation rates among women did continue to converge towards those of men over the course of the last twenty years (the gap decreased from 18 points in 1990 to 9 points in 2012), at the same time, the proportion of part-time jobs has increased, particularly in the late 1990s, when such jobs benefitted from a number of tax relief provisions such jobs. In 2012, 80% of part-time positions were held by women. It is therefore important to consider the implications of part-time working for inequalities between men and women.

[7] Meron M., L. Omalek and V. Ulrich (2009): "Métiers et parcours professionnels des hommes et des femmes", *INSEE Références, France Portrait Social*.

[8] *Regards sur la Parité* (2012) facts sheets, 'Conditions de vie'.

## 2. Measuring domestic work

Domestic work, the majority of which is carried out by women, accounts for a significant number of hours that are not taken into account when calculating the gross domestic product (GDP) since it is unpaid work. A number of studies have sought to estimate the value created by domestic work in monetary terms with impressive results, namely an additional 24% of GDP in the United States in 1997, 27-39% in the same year in Switzerland and 33% in France. The same approximate figures have been obtained from Emplois du temps (Time use) surveys in Australia, Bulgaria, Denmark, Finland, France, Germany and Norway. Of course, these estimations depend on the method used and the scope of the domestic activities taken into account[a].

These quantifications help demonstrate the importance of this type of work, which contributes to the smooth running of society, and highlight the fact that changes in the way such tasks are shared between members of the household or transferring their responsibility to the commercial sector would require very significant restructuring efforts that cannot be underestimated. One issue that is often overlooked but nevertheless particularly enlightening with regards to the roles of women is that of caring for a dependent relative. Women are more commonly to be found as caregivers than men, with 70-75% of help provided by women, and in the event of the dependent requiring a great deal of care, almost half of those that help dependent relatives claim to have had to adjust their professional lives accordingly[b].

[a] Landefeld J., S. Steven and H. McCulla (2000): "Accounting for Nonmarket Household Production within a National Accounts Framework", *Review of Income and Wealth*, vol. 46, no 3, pp. 289-307; Sousa-Poza A., H. Schmid and R. Widmer (2001): "The Allocation and Value of Time Assigned to Housework and Child-Care: An Analysis for Switzerland", *Journal of Population Economics*, no 14, pp. 599-618; Roy D. (2012): "Le travail domestique: 60 milliards d'heures en 2010", *INSEE Première*, no 1423; Goldschmidt-Clermont L. and E. Pagnossin-Aligisakis (1999): "Households' Non-SNA Production: Labour Time, Value of Labour and of Product, and Contribution to Extended Private Consumption", *Review of Income and Wealth*, vol. 45, no 4, pp. 519-529; Roy D. (2011): "La contribution du travail domestique au bien-être matériel des ménages : une quantification à partir de l'enquête Emploi du temps", *INSEE Working Paper*, no F1104.

[b] Bonnet C., E. Cambois, C. Cases and J. Gaymu (2011): "La dépendance : aujourd'hui l'affaire des femmes, demain davantage celle des hommes?", *Population et Société*, no 483.

### Part-time working and career interruptions

In addition to part-time working (*cf. supra*), breaks in the individual's working pattern also have a long-term effect on the hourly wage; a number of studies have shown that periods of inactivity are followed by a slower rate of salary progression and are detrimental to the individual's chances of promotion, be they men or women, and even when the inactivity is due to medical reasons.[9]

It is difficult to view such penalties in economically rational terms since no studies have demonstrated the negative impact of part-time working and periods of inactivity on employee productivity levels. Another explanation would be that reduced working hours and breaks in the individual's working pattern could be perceived by the market as indicative of a lack of commitment to the position or indeed to the company, which would justify a lower wage.[10] The pay scheme can also reflect needs for employee availability; a position that requires greater availability on the part of the employee, because it involves working long hours or because the hours are irregular or unpredictable, for example, will come with a higher hourly wage than a position that does not require such high levels of availability. This need for presence and availability can be the result of technical constraints or stem from social convention or a highly competitive promotion system that encourages employees to work inefficiently long hours.[11] This interpretation raises the issue of social standards and stereotypes in the professional sphere. Whilst certain aspects of production, and therefore pay, are likely due to technological reasons, the significant differences that exist between countries would suggest that we cannot adhere solely to the technological explanation. In Sweden, for example, part-time workers incur little in the way of wage penalty and enjoy far greater autonomy in their employment than elsewhere.[12]

### Segregation by position held

Another characteristic of the female labour market is its poor level of diversity in comparison with the male labour market, with half of all positions held by women falling within one of 18 occupations, divided into 12 professional families.[13] Women are frequently employed as cleaners, teachers, administrative civil servants, salespeople, personal care-workers and home-helps, as well as nursing auxiliaries, nurses, secretaries and childcare assistants. Men, however, are employed in a wider variety of spheres, with half of all positions held by men falling within one of 38 occupations and 20 professional families.

[9] See, for example, Reuben R. (1988): "Sex-Related Wage Differentials and Women's Interrupted Labor Careers. The Chicken or the Egg", *Journal of Labor Economics*, vol. 6, no 3, pp. 277-301.

[10] Seabright P. (2012): *The War of the Sexes*, Princeton University Press.

[11] Goldin C. (2014): "A Grand Gender Convergence: Its Last Chapter", *American Economic Review*, vol. 104, no 4, pp. 1-30.

[12] Bardasi E. and J.C. Gornick (2008): "Working for Less? Women's Part-Time Wage Penalties Across Countries", *Feminist Economics*, vol. 14, no 1, pp. 37-72; Halldén K., D. Gallie and Y. Zhou (2012): "The Skills and Autonomy of Female Part-Time Work in Britain and Sweden", *Research in Social Stratification and Mobility*, vol. 30, no 2, pp. 187-201.

[13] Professional families: list of 226 occupations.

A segregation scoring system has been devised for the purposes of comparing, between countries, the intensity of this confinement of men and women to specific jobs.[14] This segregation is no more intense in France than anywhere else; in fact, it is less strongly felt than in Denmark, Norway and Sweden but more strongly felt than in Italy. It is important, however, to remember that this score is considered for a given gender gap in labour market participation: a significant difference in labour market participation rates implies a lower segregation score given that, in countries with low female participation rates, it is precisely the more qualified women who do work. The difference in participation rates in Italy, however, is significant, reaching 21 percentage points. With only a 10 percentage points participation differential, segregation levels appear lower in France than in the United Kingdom.

### 'Feminised' occupations

Whilst women may be less well paid as a result of their choice of occupation and sector, it is important to consider whether they choose lower-paid occupations or whether the feminisation of an occupation results in it paying a lower wage.

The results available show that both effects do, in fact, exist and have a significant scope. Women are over-represented in sectors characterised by hours that offer fewer constraints and limited uncertainty with regards to employment and career prospects, such as the public sector for example. It is also true, however, that for a given job specification, it has been shown that an increase in the proportion of women in a sector did reduce wages in said sector.[15]

A number of theories have been put forward in an attempt to explain why positions of 'comparable worth' come with different salaries depending on the composition of their workforce. One initial explanation suggests that women seek positions that offer non-monetary benefits such as more flexible hours, a stable income and career development mechanisms that leave little room for competition. In this respect, an employer offering positions that come with such benefits can afford to pay a lower wage. Whilst this aspect is in all likelihood a significant one for higher-paid females, there is no shortage of examples of feminised occupations with modest or unstable rates of pay, despite the fact that they impose strong time constraints (nurses, cleaners, cashiers, etc.).

Another argument claims that a woman's ability to negotiate wages may not be as strong as a man's. This difference is believed to be due to a reluctance on the part of women to express their demands and to put themselves in situations of conflict (see below), and also to the fact that they are believed to internalise the idea that their wage is merely a secondary income.

Such mechanisms help give an economic explanation to why wages are lower in feminised sectors. Yet they fail to explain the whole picture, largely because they consider female-specific preferences to be a given, when they have yet to be explained.

### Education and choice of occupation

The gender-related distribution of occupations between men and women is not due to poor performance on the part of girls at school or in higher education.[16] Whilst girls do achieve better results from primary school right through to higher education, persistent gender stereotypes still exist where the choice of course is concerned. Indeed, many higher education courses attract primarily male or female students; whilst intensive foundation degrees, engineering schools and technical courses attract mostly boys, the overwhelming majority of students taking courses relating to social and paramedical, literary and artistic occupations are girls. The gender balance within legal courses and at business and management schools, however, is more even.

The choice of field of study is a key factor in determining the careers men and women will pursue as well as the gap in their respective hourly wages. Estimations indicate that *almost half* of the wage gap between male and female graduates is due to choice of field of study.[17]

### Professional equality

Segregation is a costly matter for women since feminised occupations and sectors offer lower rates of pay. Should we, then, be striving for professional equality defined as male-female equality in all categories of employment?

At the aggregate level, restrictions on access to certain jobs are, in principle, costly, since they imply that part of the talent available within an economy remains under-used. There is, however, no sound evidence to indicate that sectors or companies with less significant male-female segregation perform better. In theory, if men and women choose different career paths because they have different preferences or skills, the resulting segregation is an optimum that does not incur any social cost. Segregation does, however, pose a problem if it is the result of the way in which the roles of men and women are represented with no relation to their actual skills –in other words, stereotypes. In such cases, worker allocation is less than ideal and potential talent is wasted.

[14] See appendix online.

[15] Sorensen E. (1994): *Comparable Worth: Is it a Worthy Policy?*, Princeton University Press.

[16] Ministère des Droits des femmes (Department for Women's Rights) (2012): "L'égalité entre les femmes et les hommes", *Chiffres-clés*.

[17] Machin S. and P. Puhani (2006): *The Contribution of Degree Subject to the Gender Wage Gap for Graduates: A Comparison of Britain, France and Germany*, Report to the Anglo-German Foundation.

Stereotypes are important since young people entering the job market are required to make decisions in situations in which they have only incomplete information and have to anticipate the likelihood of them succeeding in different occupations. Such anticipation is based partially on the observation of individuals of the same gender in different occupations. The absence of women in certain sectors and occupations may lead to incorrect anticipations and to segregation, even on the supposition that men and women have identical preferences and skills.[18] Increasing the presence of women in certain occupations therefore becomes an important step in breaking down such stereotypes, and in this respect, policies designed to promote professional equality are justified.

### Promotion

In addition to the segregation of women in certain occupations, there is also a vertical segregation that confines them to the lower end of the career ladder. The paces at which men and women achieve promotion vary greatly, which only serves to widen the wage gap. This also partially explains why the gender wage gap is far more significant towards the latter stages of a career, rather than earlier on.

The low rate of promotion among women can stem from discriminatory decisions on the part of selection committees and management staff. It can also be the result of a low female propensity to apply for such positions. Identifying these two effects is no easy matter, but the (few) studies that have looked at this issue indicate that the situation has changed over time. Whilst in the 1970s-1980s there was indeed evidence of discrimination against women, the dominant factor in more recent times would rather appear to be the low number of female applicants.[19]

How do we explain the fact that women are less likely to seek promotion than men? It is possible that a promotion would bring with it certain requirements in terms of professional availability that some women would be reluctant to accept. Other explanations relate to gender-related behaviours. If women find competitive situations unpleasant, are reluctant to take risks or try to conform to stereotypes that purport that women should not 'push themselves forward' or indeed if they have taken on board certain constraints, or aspects which they perceive as such, with regards to balancing professional and family life, they will be less inclined to apply when there is an opportunity for promotion. One might, of course, oppose this argument on the grounds that it is based on the assumption that men and women have different preferences. Another explanation maintains that merely anticipating discrimination can be enough to discourage women from applying, even where the anticipation of discrimination is unfounded.

**Observation 2.** The core of the female work force is employed in a small number of relatively poorly paid professions and at the lower end of the hierarchy. This concentration is partially the result of deliberate choices; it is also partially due to the image portrayed by professionals in the sector and by collective mental structures (stereotypes).

## Stereotypes: myth or reality?

If a significant share of the wage gap between men and women is the result of them having made different choices (working hours, education, sector, etc.), it is then important to consider the actual nature of such choices. Are they the result of preferences inherent in women or, conversely, do they stem from social constructions that result in them taking responsibility for the majority of the non-commercial work to be done in the home?

### Preference and attitudes

There appear to be two main attitudes with particularly strong connections to professional performance, these being an appetite for risk and competition, on the one hand, and attitudes towards others, including the ability to negotiate and to trust others and a sense of altruism, on the other (*cf.* inset 3).

Some of the differences between the sexes in these two respects can explain both the differences in the way men and women are allocated to different positions and the observed wage gaps for holding the same position. The labour market rewards those who take risks (possibility of losing one's job, fluctuating income, etc.) with higher rates of pay, as a result of which women choosing less risky jobs are in fact confining themselves to lower-paid jobs. Indeed, women are generally under-represented in high-risk sectors, such as the financial sector, and over-represented in highly stable sectors, such as the public sector, for example.

In those environments in which promotion is a highly competitive matter, which is often the case, women are less likely to apply for promotion than are men since they tend to reject competition, meaning that they are less likely to obtain the best-paid positions. Attitudes towards negotiation can also have a negative impact on the likelihood of women being promoted and a significant impact on wage gaps in sectors in which pay is negotiated on an individual basis. Finally, a greater sense of altruism among women might explain why women are over-represented in care-giving and childcare occupations and occupations in the social field.

[18] See Breen R. and C. García-Peñalosa (2002): "Bayesian Learning and Gender Segregation", *Journal of Labor Economics*, vol. 20, no 4, pp. 899-922.

[19] *Cf.* Rouse C. and C. Goldin (2000): "Orchestrating Impartiality: The Impact of 'Blind' Auditions on Female Musicians", *American Economic Review*, vol. 90, no 4, pp. 715-74 and Bosquet C., P.P. Combes and C. García-Peñalosa (2013): "Gender and Competition: Evidence from Academic Promotions in France", *CEPR Discussion Paper*, no 9711.

## 3. Measuring stereotypes

Researchers have recently turned their attention to measuring gender stereotypes using laboratory experiments. These studies have explored potential differences between the sexes in matters as diverse as altruism (defined as the propensity to make decisions that benefit others) and appetite for competition whilst attempting to link such traits with individuals' performances in the labour market.

The experiments performed indicate significant gender differences in a number of these aspects[a]. Women, for example, appear to have less of an appetite for risk, more often than not choosing less risky roles in return for a lower wage. They also appear to have little appetite for competition, seeking to avoid situations in which they will be judged in terms of the results of a competition and preferring pay structures based on absolute performance.

Other studies have examined gender-related differences in relationships with others. The ability to negotiate for the benefit of one's own interests would appear to differ greatly between the sexes, with women less likely to ask for a wage increase and spending less time negotiating. Furthermore, they are penalised when they adopt 'male attitudes', with corporate studies showing that women who engage in negotiation with their superiors (be it regarding their salary or any other matter) receive negative assessments from their superiors, which is not the case with men. Finally, a series of studies have shown that women are more altruistic than men.

[a] For specific references see Azmat, G. and Petrongolo, B. (2014): 'Gender and the Labour Market: What Have we Learned from Field and Lab Experiments?', Labour Economics, to be published.

### Nature or social construction?

These gender-related differences in preferences and behaviours can stem from social constructions, but they can also be of an evolutionary origin. The evolutionary explanations developed in Anglo-Saxon literature claim that procreation and childcare-related activities have created within the human species a specialisation that involves different character traits in men and women. Similarly, academics have highlighted some biological effects, such as the impact of male hormone levels on attitude towards risk for example.[20] Far from any form of naturalism, the social anthropology studies developed by Françoise Héritier also draw on the biological field to explain how social institutions and representation systems came into being.[21]

Regardless of the origins of stereotypes, social interaction plays a key role in reinforcing them within the home, at school and in society in general.

The few studies that do look at the transmission of preferences relate to having children and the participation of women in the labour market. A mother's job prospects are negatively influenced by the number of children she has, whilst her attitude towards having children and towards employment will influence the next generation.[22] Generally-speaking, women whose mother had lots of children will want lots of children themselves, which results in a decline in their labour participation; men are also more likely to favour the participation of women in the labour market if their mothers worked.[23]

One of the most alarming results regarding the origin of gender-specific attitudes stems from studies on single-sex schools.[24] The attitudes of girls educated at single-sex schools towards risk and competition, for example, are identical to those of boys, whereas this is not the case with girls who studied in coeducational schools. With regards to negotiation behaviours, meanwhile, a recent study showed that the circulation of transparent information can eliminate any differences between men and women.[25] Once they are familiar with the rates of pay and working conditions of their colleagues, women demand similar conditions.

**Observation 3.** Whatever their origin, gender-related stereotypes are affected by context, meaning that it is possible to alter them by means of social interaction.

[20] Apicella C.L., A. Dreber, B. Campbell, P.B. Gray, M. Hoffman and A.C. Little (2008): "Testosterone and Financial Risk Preferences", *Evolution and Human Behavior*, no 29, pp. 384-390.

[21] Héritier F. (1996): *Masculin-féminin I. La pensée de la différence*, Odile Jacob.

[22] Angrist J.D. and W.N. Evans (1998): "Children and Their Parents' Labor Supply: Evidence from Exogenous Variation in Family Size", *American Economic Review*, vol. 88, no 3, pp. 450-77.

[23] Fogli A. and R. Fernandez (2009): "Culture: An Empirical Investigation of Beliefs, Work, and Fertility", *American Economic Journal: Macroeconomics*, vol. 1, no 1, pp. 146-77.

[24] Booth A., L. Cardona-Sosa and P. Nolen (2014): "Gender Differences in Risk Aversion: Do Single-Sex Environments Affect their Development?", *Journal of Economic Behavior & Organization*, no 99, pp. 126-154.

[25] Bowles H.R., L. Babcock and L. Lai (2007): "Social Incentives for Gender Differences in the Propensity to Initiate Negotiations: Sometimes it Does Hurt to Ask", *Organizational Behavior and Human Decision Processes,* no 103, pp. 84-103.

## Public policies designed to reduce inequalities between men and women

Introducing public policies designed to reduce gender inequalities raises the issue of the objectives they aim to achieve.

The first argument is that of social justice, in the sense that inequalities linked to characteristics over which the individual has no control must be combated. These characteristics can relate to ethnic or social origin, as well as to the person's gender. This principle is one that is straightforward enough to put into practice since it involves granting equality in the eyes of the law, and in this respect, the 20th Century has enabled a great deal of progress to be made towards reducing legal inequalities between men and women. When it comes to achieving equality in practice, however, the impact of public policies must also be felt by the mechanisms at the root of the social construction of such inequalities.

There is, of course, an ethical difficulty with regards to respecting individual preferences. The empirical studies outlined above show that inequalities between men and women in the labour market now stem primarily from a social construction relating to sharing domestic tasks, as well as from gender-specific behaviours and preferences that result in men and women making different choices. Whilst we believe that upholding individual preferences as they are expressed through personal decisions is crucial, it is also important that we challenge the socially constructed correlation between gender and preference.

The aim of social justice should not overshadow the need for economic efficiency that underlies the reduction in inequalities between men and women; indeed, maintaining a lesser contribution on the part of women in the labour market means limiting, within the market sphere, the expression of talents that could be beneficial to all parties. It also exposes women to the risk of poverty when the volatility of relationships is taken into account. It is important, however, not to overlook the impact of non-market domestic activities on our economy and the well-being of society as a whole. Encouraging women to play a more significant role in the labour market involves making choices regarding the way in which society wishes to take responsibility for or share domestic activities, particularly where caring for young children and other dependants is concerned.

With these principles in mind, it is possible to outline a public initiative aimed at sustainably reducing gender inequalities by tackling the causes of such inequalities and not confining oneself to a legal approach consisting of passing legislation that underlines the equality of men and women in the eyes of the law.

### Education and the formation of stereotypes

As we have already seen, the types of course girls choose to follow have a very significant impact on the wage gap between men and women. A number of steps could be taken to encourage course choices based on talent and appetite rather than on gender-related representations of certain disciplines and careers. Initiatives designed to encourage girls to go into scientific fields, where they are currently under-represented, should be systematised and include such initiatives as prize for academic excellence for girls, raising awareness among teachers and career advisers, developing role models where choice of discipline is concerned, etc. Programmes designed to promote the visibility of female scientists who have carved successful careers for themselves, for example, are likely to help change the perception that scientific fields are exclusively male territory. It is also important to raise awareness among teachers of the issues associated with the career choices made by boys and girls in order for them to adapt their approach to such matters accordingly and avoid encouraging social reproduction.

In the case of France, intensive foundation courses and competitive entrance examinations for the '*grandes* écoles' (selective higher education colleges) play a very significant role. Offering financial incentives to establishments to encourage a more gender-balanced mix of students might therefore be an option. One strategy that has been suggested on various occasions is organising separate examinations for males and females in order to guarantee a certain recruitment quota for each institution. We believe that an initiative of this kind would have too many drawbacks to make it a viable option, not least because it would mean institutionalising differentiation between girls and boys and could even lead to suspicions of inequality in terms of skill and treatment.

> **Recommendation 1.** To fight stereotypes in the types of course boys and girls choose by promoting the visibility of women in 'male' occupations and heightening awareness of the issue among teachers, parents and career advisers.

### Collective responsibility for or sharing of domestic activities

Domestic activities, the majority of which are undertaken by women, are of great value to society and cannot all be performed using technological developments. There are two potential developments that would be in favour of gender equality, the first of these being collective (or commercial) responsibility for such activities, the second involving sharing such activities between the man and the woman in a relationship.

The collective responsibility option (childcare, retirement homes, etc.) actually enables the cost of such initiatives to be split between men and women and in more general terms across the population as a whole. It is also the most effective policy in terms of facilitating the participation of women

in the labour market. Whilst France is rather well positioned in international terms with regards to providing childcare for young children, maintaining the efforts made in this field over recent years should be a matter of priority since the demand for childcare facilities for young children is far from being met right throughout the country.[26] With regards to dependency, the approaches adopted thus far are in favour of elderly people remaining in their own homes, creating a significant amount of domestic work for their care-givers, 75% of whom are women. Creating a public service for old-age dependency would help redress the balance of female activity in favour of paid work, in addition to providing a better level of care for the elderly.

**Recommendation 2.** To maintain the efforts made to provide childcare for young children by increasing the number of childcare places available and to improve the care provided for those who are dependent upon others.

The other option involves improving the way in which domestic activities are shared between men and women. The recent reform of the *Complément de libre choix d'activité* ('Allowance for the Freedom of Choice to Work, CLCA),[27] which introduces an obligatory six months' parental leave for the other parent in order to benefit from the maximum duration of leave (three years), represents a step in this direction. The obligation for such leave to be shared is more stringently imposed in the Nordic countries; in Sweden, for example, since 2008, the income maintenance benefit received during parental leave is higher the more fairly it is shared between the partners in the relationship. It would be perfectly logical to steer French legislation in this direction, such as the proposal in the social security budget for 2015 to be discussed (disclosed September 2014). Such systems do not represent a burden on public finance since they do not introduce any additional rights but rather an obligation to ensure that the load is distributed more evenly between the two partners in the relationship.

**Recommendation 3.** To continue the reform of the *Complément de libre choix d'activité* ('Allowance for the Freedom of Choice to Work', CLCA) to encourage parental leave to be split between both parents.

Furthermore, income replacement benefits are not the same for paid maternity or paternity leave and for ordinary paid leave or paid holidays resulting from the reduction in statutory weekly working hours. Indeed, the daily allowances that replace the normal wage during periods of maternity or paternity leave are limited to the Social Security cap, whereas the employer pays a full wage during periods of paid leave and other income replacement benefits are capped at much higher levels. This results in a very low proportion of fathers in executive positions using their paternity leave and in a degree of inequality in the way maternity leave is managed, depending on the allowance systems in place in the company in question. In order to encourage the involvement of both parents in raising their children, improving the management of maternity and paternity leave, funded by a slight reduction in standard leave, might be the way forward.[28] Indeed, France offers relatively short periods of maternity and paternity leave in comparison with its European neighbours, although employees do benefit from more paid leave and other paid holidays than elsewhere. A better collective management of maternity and paternity leave would effectively reduce both the penalty for women of having children and the cost for employers of employing women of child-bearing age, as well as encourage greater involvement on the part of fathers from the moment the child is born.

**Recommendation 4.** To improve the daily allowances paid during periods of maternity/paternity leave and to fund this improvement by means of a slight reduction in standard leave.

## Quotas: where and why?

Much of the effort made to improve women's professional careers has consisted, both in France and elsewhere, of introducing various quotas. These policies are designed to reduce the gender wage gap by increasing women's presence in key positions, such as on boards of directors, in political bodies, in public administration managerial positions, etc., and to encourage them to further their careers by means of the feminisation of decision-making committees.

The use of quotas is, nevertheless, somewhat controversial in that whilst they may be driven by the principle of equality, they do, nevertheless, involve institutionalising differentiation between women and men. Their effects on stereotypes are also unclear. Quotas may have a detrimental effect on the credibility of women who may be suspected of being granted responsibilities based solely on their gender, thus reinforcing the idea that women are less able than men.

[26] *Cf.*, for example, Pélamourgues B. (2012): "Quelle offre territoriale pour l'accueil des jeunes enfants? ", *L'Essentiel CNAF*, October.

[27] *Cf.* Law on gender equality adopted on 23 July 2014.

[28] A rough calculation would appear to indicate that reducing the number of days' leave granted to all employees by one day would free up enough resources to fund 16 days additional maternity/paternity leave without changing the wage bill. In order to avoid any form of discrimination with regards to hiring adults that are likely to have children, it would be preferable for the State, and therefore Social Security, to take responsibility for these additional days of maternity/paternity leave, whilst ordinary leave is funded directly by the company.

Previous assessments of the introduction of quotas on electoral lists and selection committees have produced contrasting results.[29] Furthermore, can we be sure that the feminisation of committees actually favours women? A recent study on selection panels for Spain's judges indicates a situation whereby, the greater the proportion of women on the selection committee,[30] the lesser the chances female candidates had of being recruited. The policy of parity on committees can also prove costly for women who are already in the profession since a low number of women in a profession requires that each of them sit on a greater number of committees than men, to the detriment of other aspects of their career that might prove more enhancive and fulfilling.

Given the significant risks associated with quota policies, it is important to identify those that are likely to have the greatest impact. One potential approach would be to introduce quotas on responsibilities where the presence of women may lead to decisions that will affect the opportunities afforded to other women. The first example that springs to mind is political representation, but it might also be wise to introduce quotas on trade union representation. Given the low presence of women in such delegations,[31] a quota system designed to encourage the feminisation of trade union representations could help increase rates of pay in feminised positions and, in more general terms, highlight issues relating to women's working conditions.

**Recommendation 5.** To avoid using quotas other than in situations where the presence of women may have a direct impact on the opportunities afforded to other women, such as political and trade union representation.

## The socio-fiscal system

Any direct redistribution of resources between the sexes is excluded by the legal framework of the European Union, which prohibits any discrimination between men and women, including the introduction of positive discrimination policies.[32] With this in mind, measures must focus on reducing systems that actually amplify the inequalities suffered by women, and there are two major fields that come to mind, these being taxation and pensions.

### Taxation

The French taxation system incorporates one well-known element that serves to create inequalities between men and women, this being joint income taxation. The general principle involves the joint taxation of the two partners in the relationship and applying the progressive taxation scale to the couple's average income. Joint taxation raises the marginal tax rate on the 'second' wage-earner (usually the woman), thus discouraging them from participating in the labour market.

Existing studies agree that this form of tax treatment is detrimental to both labour force participation rates among women and their rates of pay and recommend reducing the marginal rate applicable to the second wage-earner in the relationship in order to encourage them to participate in the labour market.[33] The few figures that exist suggest that the joint income tax system has reduced the rate of employment among women in France by 1-2 percentage points.[34] These figures underestimate the overall effect of joint taxation since they do not take into account the fact that the participation of women in the labour market has long-term impacts on their salary progression and on their pension levels. A number of studies have analysed the impact of fiscal reforms that have involved transferring the tax basis from the individual to the couple or vice-versa, in the United States, the Czech Republic, Sweden and the United Kingdom. Such studies have concluded that joint taxation has a negative impact on the female rate of employment, which falls between 2 and 10 percentage points lower with joint taxation rather than with individual taxation.[35] This impact represents a strong argument in favour of the individual taxation of income, which in no way implies that the individual's family situation and the number of children they have should not be taken into account for taxation purposes. It is simply a matter of using tax abatement mechanisms for dependants rather than the joint income tax system.

**Recommendation 6.** To abolish the joint income tax system whilst still taking into account any dependants for taxation purposes, by means of an abatement, for example.

[29] Ahern K.R. and A.K. Dittmar (2012): "The Changing of the Boards: The Impact on Firm Valuation of Mandated Female Board Representation", *The Quarterly Journal of Economics,* vol. 127, no 1, pp. 137-197; Matsa D.A. and A.R. Miller (2013): "A Female Style in Corporate Leadership? Evidence from Quotas", *American Economic Journal: Applied Economics*, vol. 5, no 3, pp. 136-169; Besley T., O. Folke, T. Persson and J. Rickne (2013): *Gender Quotas and the Crisis of the Mediocre Man: Theory and Evidence from Sweden*, Mimeo.

[30] Bagues M.F. and B. Esteve-Volart (2010): "Can Gender Parity Break the Glass Ceiling? Evidence from a Repeated Randomized Experiment", *The Review of Economic Studies*, vol. 77, no 4, pp. 1301-1328.

[31] In 2014, the national executive boards of four of the six major French trade union organisations are comprised of only a third or fewer women, with one of them having only 13%. See *Rapport du Sénat*, no 788 of 22 July 2013 and the organisations' website.

[32] This framework has led to pension systems originally designed to offset inequalities suffered primarily by women being extended to men.

[33] Kleven H., C. Kreiner and E. Saez (2009): "The Optimal Taxation of Couples", *Econometrica*, vol. 77, no 2, pp. 537-560.

[34] Carbonnier C. (2014): "The Influence of Taxes on Employment of Married Women, Evidence from the French Joint Income Tax System", *LIEPP Working Paper*, no 23; Landais C., T. Piketty and E. Saez (2011): *Pour une révolution fiscale*. La République des Idées, Le Seuil.

[35] Kaliskova K. (2013): "Family Taxation and the Female Labor Supply: Evidence from the Czech Republic", *CERGE-EI Working Papers*, no wp496; LaLumia S. (2008): "The Effects of Joint Taxation of Married Couples on Labor Supply and Non-Wage Income", *Journal of Public Economics*, vol. 92, no 7, pp. 1698-1719; Selin H. (2009): "The Rise in Female Employment and the Role of Tax Incentives. An Empirical Analysis of the Swedish Individual Tax Reform of 1971", *CESifo Working Paper*, o 2629.

## Pensions

Another aspect of our socio-fiscal legislation relates to family pension rights, which can have undesirable effects. The main mechanism is designed to enhance the pensions of those with three or more children, offering a pension increase of 10% for men and women who have raised at least three children. This system primarily benefits men since they have higher pensions, even though it is primarily women who suffer setbacks in their careers as a result of raising children. Such systems are of great cost to public finance (5.7 billion euros for basic schemes),[36] despite the fact that they have not been proven to encourage people to have children, are of no benefit to families (since beneficiaries generally no longer have dependent children) and even have an anti-redistributive effect.[37] The taxation of such bonuses, which was decided in the framework of the 2014 Finance Act, partially compensates for the anti-redistributive nature of the system without, however, challenging it. Given the various objectives of family policies (to encourage people to have children, to redistribute resources in favour of families, and particularly the most modest of households, etc.) and the aim of reducing inequalities between women and men, it would be wise to gradually withdraw pension bonuses for children and to reallocate the corresponding expenditure to increasing the number of childcare places available, such as in crèches, for example.[38]

There is, however, another family pension right system that is worthy of discussion, this being the increased period of coverage scheme (*Majoration de durée d'assurance,* MDA), which credits women who have had children with additional pension contribution quarters. The MDA scheme offers the advantage of benefiting women directly and therefore contributing to the reduction in inequalities. Having said that, it is not particularly well suited to career inequalities between men and women, which more often than not take the form of reduced pay and/or part-time working; these, of course, result in a reduced reference salary that is not compensated for with additional pension contribution quarters afforded by the MDA scheme. Reforming the MDA scheme in favour of pension bonuses for women with children yet small pensions would help better target the system at female employees who have effectively incurred some sort of penalty in their careers as a result of having played a more intense role in raising their children.

Finally, certain countries such as Denmark, Sweden and the Netherlands have done away with survivors' pension schemes, believing them to be obsolete with the increase in separations and divorces and with the aim of encouraging women to participate in the labour market by enhancing financial incentives right throughout the life cycle. It might prove beneficial to give this notion some thought in the case of France.

**Recommendation 7.** To reform family pension rights to reduce systems that amplify inequalities between men and women by gradually withdrawing pension bonuses for having raised three children, reallocating the corresponding expenditure to increasing the number of childcare places available. To reform the increased period of coverage (MDA) scheme.

Inequalities in earned income between women and men stem from professional choices, some of which are the result of collective social representations, others of fiscal and social imbalances. Since inequalities have ceased to decline since the 1990s, it is important that we fight stereotypes, reduce inequalities with regards to caring for children and dependants and, ultimately, eliminate the fiscal and social imbalances that only add to the already significant weight of social representations.

[36] *Cf.* Moreau Y. (2013): *Nos retraites demain : équilibre financier et justice*, Rapport de la Commission pour l'avenir des retraites, June.

[37] Bonnet C., A. Bozio, C. Landais and S. Rabaté (2013): "Réformer le système de retraite : les droits familiaux et conjugaux", *Rapport IPP*, no 2, June; Conseil d'Orientation des Retraites (COR) (2008): *Retraites : droits familiaux et conjugaux*, sixth report by the COR, December.

[38] In 2011, public expenditure on childcare facilities for children under three years of age reached 4.6 billion euros, *cf.* www.securite-sociale.fr/IMG/pdf/indicateur9_pqe_famille.pdf. The recirculation of pension bonuses allocated for having raised three children or more would therefore help to nearly double the number of crèche places available.