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Does Fertility Respond to Work and Family-life Reconciliation Policies in France?

First draft

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Abstract:

The current total fertility rate in France has been rising over the last ten years and reached 1.98 in 2006, the highest level since the early 1980s. By European standards, this high level of fertility makes France an outlier, despite having similar trends in the transition to adulthood, partnerships, attitudes to birth control, or economic situations (low growth, increase in poverty levels). Thus, the French case challenges some of the hypotheses suggested to explain the current low fertility observed in European countries. France's fertility level can be explained by its long-standing family policy, which has evolved considerably since the 1980s to accommodate the growing participation of women in the labour force. This policy encompasses a wide range of instruments, geared to different actors and motivations and aiming to serve different objectives. Despite some ambiguities, family policy seems to have generated very positive attitudes towards two- or three-child families in France, and to have reduced the propensity to remain childless. We argue that a key aspect is the favourable context created for reconciling work and family life by means of fairly comprehensive and continuous support to families throughout the family life-course. The entire set of complementary instruments (financial support to large families, parental leave schemes and the provision of childcare) creates a secure climate for child-bearing decisions. This also explains why the decision to have children or to be in employment is less based on socioeconomic status than in other countries.

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For the past two years, France has enjoyed fertility rates approaching the replacement level, with a period fertility rate of 1.98 in 2006 and 1.96 in 2007. After a ten-year period of slow growth, the fertility rate thus reached its highest level in about thirty years (Prioux, 2007). This places France at the very top of European and other OECD countries. However, this high level of fertility is somewhat puzzling, because most of the trends emerging from Western countries since the 1970s may also be seen in France. Young people have increased their educational investment, delayed their entry onto the labour market and the time when they leave their parents' homes. Changes are especially important for women, whose labour force participation continues to grow.

Young generations face relatively high unemployment rates and have become increasingly uncertain about their labour force status. Demographic changes are also shaped by the transformation of values, such as those related to the affirmation of what Giddens and subsequent authors have named the "individualism of society", or the increasing concern about gender equality. Such changes may contribute to explain the increase in non-marital cohabitation, in the use of contraceptives and birth control, or the rise in divorce. However, one should be cautious about these changes in values since there is also some resistance to gender equality, as reflected by the very slight changes in the division of labour between men and women.

All these factors help explain why younger generations are inclined to delay childbearing in France as in other Western countries, and are factors that could lead to a permanent low fertility situation (Bongaarts, 2001; Kohler, Billari, Ortega, 2006; Morgan and Taylor, 2006; Lutz *et al.*, 2006). However, although France exhibits most of the abovementioned trends, fertility is maintained at a relatively high level compared with other continental or southern European countries. As we mention earlier, this situation reflects some specific characteristics of fertility behaviour: a relatively low proportion of women remaining childless; an increasing norm towards two children and a standardization of childbirth timing. There are also fairly small differences in family size across social classes. All these factors produces relatively stable fertility rates when estimated after control of tempo changes (Toulemon *et al.*, 2008).

One factor that explains this situation, is the longstanding family policy implemented in France, especially since World War II. Because of its multiple grounds, France has a variable and often contradictory position in the classification of Western welfare systems (Meulders and O'Dorchai, 2007; Thévenon, 2006). The second part of this paper briefly presents the background to the family policies, their relation to families' living standards and how they have been progressively influenced by the issue of work and family-life conciliation. Support to families, and especially to working parents, is relatively comprehensive, i.e. quite diversified and continuous over the family life-course. A key difference with some other Continental European countries is that women find relatively broad support for combining entry into employment and motherhood, i.e. full-time employment with the birth of the first child (Thévenon, 2006).

However, it is somewhat difficult to assess the effective impact of these policies on fertility behaviour. One obvious reason is that the family policy package forms a set that cannot be reduced to the sum of its parts, as stated by Héran (2002). Thus, there is no doubt that the entire set of family policy instruments contributes to a favourable environment for fertility and the well-being of families; yet at the same time, the interconnection of instruments makes it difficult to assess the impact of each of them individually. In spite of this limitation, the third section of this paper reviews the studies carried out on the impact of these policies on fertility and related labour market behaviour. We first review cross-country comparisons that conclude that the effect of direct financial support on fertility is relatively

weak but highlight the impact on labour market related policies. The analyses for France also point to a rather weak impact on fertility of cash and benefit transfers, but stress the incidence of labour market policies on the female workforce and the work-life balance. We argue that this comprehensive and longstanding policy creates a secure climate for simultaneously entering employment and motherhood. This may explain why a fairly low proportion of women remain childless and the weak impact of having a child on the probability of women working full-time. Extensive childcare support (through parental leave payment, childcare subsidies, the provision of services, early enrolment in preschool, and the provision of out-ofschool care) is another reason why women do not forgo having a second or third child and also explains why the decision to have children or to work is less based on socioeconomic status in France than in other countries.

I. Fertility trends and family size

I.1. Long-term or cyclical decrease in fertility?

The recent high fertility rate is viewed as a sign of the optimism of the French population since for the second consecutive year it has stood at its highest level since 1982 (Prioux, 2007). France was the first European country to display a period fertility rate of 2.0 in 2006 (1.98 excluding the French overseas departments and territories), an increase of 2.9% with respect to 2005. Although fertility rates still remain slightly lower than across the Atlantic, France, together with Iceland and Ireland, has one of the highest in Europe. This is the result of the reversal of a trend that started in the mid-1990s, following a period of relative stability during the 1980s and a slight decrease in the early 1990s. The trend was roughly in line with the economic rebound and the fall in unemployment observed in that period. Some analyses of period fertility fluctuations show that the number of births depends on the subjective evaluation by future parents of their economic situation at the time of conception, and depends also on their expectations at the time of birth (Bessone et al., 2003). Childbearing is higher when unemployment is low and economic expectations are relatively good. Nevertheless, in spite of this relationship between the economic context and TFR, the latter continued to rise after 2000, whereas the rate of economic growth and associated expectations began to deteriorate. One explanation may be that the longstanding, re-asserted family support policy created a sufficiently confident and stable climate to persuade people neither to forgo nor to postpone childbearing.

However, such a rebound in fertility also concerns other countries with different policies, such as the UK or the Nordic countries where the TFR is now higher than 1.8 children per woman. Nevertheless, France appears quite specific within continental Europe, where two groups of countries stand out (Prioux, 2007): on the one hand, Belgium, Luxembourg and the Netherlands, which show a relatively stable TFR around the intermediate level of 1.7; on the other hand, Germany, Austria and Switzerland, with fertility rates of 1.3 to 1.4 respectively and whose situation is therefore closer to countries with low-fertility. By contrast, the fertility rates have just started to increase on average in all European countries, whereas this is not detectable for all OECD countries.

Focusing only on the evolution of period fertility rates can be misleading since this is very sensitive to the timing of childbirth. In particular, a postponement of birth causes a decrease in the period rate that assumes a stable pattern for the timing of births. Thus, the usual TFR leads to an underestimation of the period fertility level. For that reason, more sophisticated indexes that control for differences in fertility by birth parity and the changes in the period of time between births are preferred (Rallu and Toulemon, 1994; Sobotka *et al.*, 2005; Bongaarts and Feeney, 2006). The Parity and Duration Total Fertility Rate (PDTFR,

also named Period Average Parity) is a more consistent estimate of period fertility (Toulemon and Mazuy, 2001). Chart 1 shows a value of around 2.0 children per woman in France, which is very close to the cohort completed fertility rate estimated for the corresponding cohorts.



Chart 1: Long-term fertility trends in France

Source: Toulemon, Pailhé, Rossier (2008)

This chart also illustrates the long-term evolution of fertility rates over the 20th century. At first glance it tends to alter our assessment of the long-term decline in fertility, since the current level of cohort fertility appears quite similar to that of the cohorts born around 1890 and 1900. However, strong variations can be observed for cohorts born inbetween: a strong increase in fertility rates first appeared for the cohorts born up to the end of the 1960s, but a decrease of similar intensity is observed after that. One major evolution between the two points in time is that infant mortality decreased sharply over the century. Some 9% of children were dying within their first year in 1900 whereas the rate is now below 0.5% (Toulemon *et al.*, 2008).

I.2. Later childbirth over the life-cycle

Another important change over the last decades concerns the timing of childbirth. Chart 2 illustrates the evolution of the average age at maternity by birth parity for women born from 1920 to 1965. The U-shape of the curves shows that women born between 1940 and 1945 had their children at the earlier point in their life-cycle, e.g. at the age of 26 years on average, compared to 28.5 years for women born in 1920. A progressive postponement of birth is however observed for women born after the Second World War. Chart 2 also reveals that the decrease in the average age at first maternity is rather limited compared with the trend for the last child. The reduction of the mother's age at the birth of the last child is explained

by two factors of roughly equal importance: successive births occurring over a shorter period, but large families are becoming progressively less frequent (Daguet 2002).



Chart 2: average age at maternity, by parity

Source: Toulemon, 2003.

Trends changed for women born after 1945 who had their children at later ages. The postponement of the first birth is sufficient in itself to explain the rise in the average age of women at childbirth. For women born in 1970 (not illustrated in the chart), the average age at birth of the first child was around 27 years, and the average age of motherhood is expected to be about 30 years (Toulemon, 2003). Prioux (2007) reported that the average age for childbirth continued to increase for women born after 1970. This is estimated at 29.9 years for women born in 1973, i.e. one year later than for the generation born in 1966. Prioux also argues that the increase in the age for childbirth has already started to slow down slightly, and may probably cease for subsequent cohorts. However, such a trend should not be misinterpreted since it is the result of a balance between a decrease in fertility rates at ages below 35 and an increase in fertility rates at an older age. Thus, the dominant trend since the early 2000s is the acceleration of the increase in fertility rates after the age of 30, as if most of the births that were postponed by women born in the seventies have now been "caught-up".

I.3. A reduction of family size to two children

Changes in family size have also been considerable over the last decades. Basically, for generations born in the early 60s (i.e. the generation for which the completed fertility rate can be estimated), the rebound of fertility recorded after the age of 30 has not been sufficient to compensate the delay in family formation. For cohorts born after 1964, the decrease in completed fertility continued but at a slower pace.

In a medium-term perspective, the decrease in average fertility for post-1930 cohorts conveys a decrease in the proportion of large families (i.e. with more than three children) with a tendency to limit family size to two children (Chart 3). The proportion of women with four children or more has fallen by 2.5 (from 25% to 10%), while the proportion of women with two children has increased by half from 27% to 40%. By contrast, the percentage of women with either one or three children has remained relatively stable at around 20%.



Chart 3: Distribution of women according to their final number of children

Source: Toulemon, Pailhé, Rossier (2008)

II.1. Low proportion of childless women

A look at parity progression ratios based on duration-specific fertility rates in Chart 4 provides more precise information on recent trends. Basically, this confirms a decrease in the propensity for having a third or a fourth child. The progression to the first child also appears to decline slightly, but this may be due to the postponement of family formation. By contrast, subsequent parity progression ratios are quite stable, indicating that the probability of a progression to the second, third and fourth child has not significantly changed since 1975. Thus, the probability to remain childless is certainly increasing, but the proportion of childless women still remains quite low in comparison with other European countries. Thus, in 2002 the actual percentage of childless women in relation to those with completed families was about 7% in France, whereas it was around 12% in Germany or Austria (see Breton and Prioux). Toulemon (2003) estimates from a larger survey on families that only about 10% of women born in 1950 remained childless; the proportion has been stable since 1935 and expected to increase somewhat in the future.

Chart 4: Period parity progression ratios



Source: Toulemon and Mazuy (2001)

II.2. Low differences in fertility across education levels and social status

Differences in family size between social groups are relatively small and decreasing a little. There are, however, some differences in fertility behaviour according to educational background. Robert-Bobée and Mazuy (2005) analysed these differences taking into account that the age at the end of school enrolment changes through cohorts. For each of these cohorts, they distinguished individuals with a short period of education, i.e. with 2 years below the mean age at the end of their birth cohort's enrolment in education, as opposed those with a long period of education (i.e. with 2 years more than the mean age). This allowed them to separate groups with around 30% of the cohort on each side, compared with the intermediate group.

For both men and women, the average number of children declined in all educational levels, and the differences between groups are decreasing (Chart 5). For men, these differences are relatively moderate and even decreasing over cohorts. Nevertheless, men with a short enrolment in the education system remain childless slightly more often, and they are also more likely to have three or more children. The contrasts are greater for women than for men. Among the cohorts born in 1950-54 and observed at the age of completed fertility, the average number of children ranged from 1.8 among women with more education to 2.4 for women with less. Women with a higher education more frequently remain childless (15% of women with a longer school enrolment born between 1945 and 1949 compared to 9% for an intermediate experience in the educational system). There are basically two explanations for that situation: they live less frequently with partner, but those living with partners also have fewer children and spend a longer period without them.



Chart 5: Differences in fertility by experience in education

Source: Toulemon, Pailhé, Rossier (2008)

Differences in educational background also have a significant impact on the time interval between births. Thus, people with a longer experience in education have a longer period without children, but the interval between the first and second child is also reduced. By contrast, individuals with little education have their first child sooner, but the second birth occurs significantly later (Robert-Bobée and Mazuy, 2005). The two-child family is also more widespread among the highly educated whereas the proportion of three-child families has continued to rise for less educated women. Only the proportion of very large families, with at least four children, has fallen for less educated women, but in a smaller proportion than for women with a higher educational level.

All in all, differences across socioeconomic status are relatively small compared to other European countries. For instance, France is not as split as Britain, where more women, especially among the most educated groups, decide to remain childless, (Ekert-Jaffé *et al.*, 2002). France is also characterised by a growing and relatively high proportion of out of wedlock births, which illustrates the de-standardization of pathways to childbearing: in 2006, they represent 50.5% of all births (Pla, 2007), whereas they account for an average of only one third of all birth in the EU 25.

II.3. A lower-than-intended fertility?

One basic argument used to advocate family policies is that men and women do not have the number of children they would like. Thevalidation of this argument faces, however, a number of challenges. The first is to quantify accurately the "desire" or "intention" to have children, since the estimation of the gap varies considerably according to the measurements used. The second challenge relates to the interpretation of this gap, since it may refer to constraints that are more or less internalized by individuals. Thus, a respondent's answer on fertility intentions is very sensitive to how the question is formulated. Moreover, intentions may vary considerably according to the institutional and policy context, so interpreting the gap between intended and effective fertility is a delicate issue.

Recent surveys conducted in Europe show important differences in the ideal number of children across the EU members (Testa, 2006). France is among the countries where this "ideal" is the highest (2.66 compared to the EU15 average of 2.29 (only Ireland has a higher number with 2.80, Denmark comes a close third with 2.63), whereas some countries like Austria, are characterized by a below-replacement family size ideal. The author also estimates the "ultimately intended family size" by adding the number of existing children to the intended number of children, and measures the gap between actual and intended family size. France ranks 6 out of the 15 EU member states. However, some authors like Lutz (2007) argue that the gap vanishes in certain countries when tempo-adjusted period fertility rates are used. That is the case in Austria, for instance, but not in France.

One reason for this gap may be related to the growing perception that fertility can be planned, even if not perfectly controlled. The legalization of abortion and the dissemination of contraception during the past forty years have certainly boosted this perception. In the late 1960s, 15% of pregnancies resulting in a birth were intended and the proportion of planned births rose from 59% in 1970 to 83% in 1995. Prospective parents now expect to choose not only the number of children, but the timing of their births. Régnier-Loilier and Léridon (2007) consider that the intervals between successive births are now rarely left to chance. For example, closely-spaced births are unusual. Whereas in the mid 1960s, almost one second birth in five occurred in the calendar year following the first birth, the proportion fell to 10% in the early 1980s and to 8% ten years later (Prioux, 1994).

Yet control over fertility is by no means perfect, since the share of "unintended" pregnancies remains very high in France. When assessing the effectiveness of birth control, the number of abortions must also be taken into account, after which about 36% of pregnancies may be estimated as "unintended". A survey on the analysis of fertility intentions, Toulemon and Testa (2005) found that the majority of individuals (58.5%) were hesitant about their intentions to have children. Altogether 6 respondents in 10 reported having no firm intention with respect to children they might have in the next five years. Thus, intentions are only one factor in many to explain births. Nevertheless, the authors noted that the predictive value of intentions varies with the level of education: higher educated individuals seem to benefit from better conditions in which to fulfil their intentions, or they anticipate their behaviour better (five years later 63% had carried out the intentions they had declared in 1998, compared with 48% for the population as a whole).

To summarize, France has relatively high fertility at near-replacement rate and the TFR rise since the mid 1990s, which is rather singular in comparison with Continental Europe. Motherhood is clearly postponed over the years but postponement is not as high as in many European countries. However, the recent rebound in period fertility rates is clearly due to the process of birth postponement. As far as completed fertility is concerned, the gap between the rate recorded for the baby-boomers and for younger cohorts is about half a child (2.6 children per woman born in 1940, more than 2.1 per woman born in the 1960s). However, younger cohorts seem prepared to achieve a level that is scarcely lower, so cohort fertility looks stable at around (or a little above) 2.0 children per woman, while the age of the mother at birth has increased.

Women in France are significantly less frequently childless compared with other European countries, and the proportion of families with three children or more still remains higher than in most European countries despite a more habitual restriction of family size to two children. For the generation born after 1945, the distribution of family size was very stable, with about 10% of women remaining childless, 20% having one child, 40% two children, 20% with three and 10% with four children or more.

Despite this apparent stability, one notes the persistence of a gap, at aggregate level, between actual fertility behaviour and intentions. Part of this gap may certainly be attributed to the obstacles individuals are facing to realise their intentions. Clearly, government policies are among the factors that can contribute to tackle these obstacles. They even may contribute to shape fertility intentions.

II. From family income protection to work-life balance policies

It is a well-documented fact that family policy has a long history in France and that fertility has traditionally been a political concern. The support received by families is thus relatively comprehensive in comparison to other countries. Nevertheless, growing concerns about employment, gender equality, child poverty and so forth, have progressively reshaped the scope and content of family policy for reconciling work and family life. Although the amount spent for all families is quantitatively quite considerable, the level and orientation of the effective support considerably vary with the socioeconomic status of the family.

II.1. A relatively high level of investment for families

The extent to which these instruments are developed and combined varies considerably between countries. From the point of view of the level of public spending on families in OECD countries, France provides a rather generous and diversified support. Chart 6 illustrates how important it is to consider tax breaks when comparing the overall support to families to avoid any bias in the comparisons, failing which financial support to families may be underestimated for countries like France (or Germany) where fiscal policy has important redistributive consequences from childless households to families with children (Adema and Ladaique, 2005). Spending on childcare and early education is also relatively high since it corresponds to 1.6% of GDP against the OECD average of 0.87%. If we take family benefits, cash payments, spending on services and tax benefits together, France ranks 3^{rd} among OECD countries in terms of public investment on families as measured by the percentage of GDP — which in the case of France is 3.8% compared with the OECD average of 2.4%.

Chart 6: Public spending on families

Public spending on family benefits, cash payments, services, and tax benefits in 2003, as a percentage of GDP



State support here only covers exclusively family-oriented support (e.g. child payments, paid leave, childcare support, etc.). Spending in other social policy areas such as health and housing also benefits families, but not exclusively, and is therefore not included here.

OECD 24 excludes Greece, Hungary, Luxembourg, Poland, Switzerland and Turkey where tax spending data are not available.

Source: OECD (2007), Babies and Bosses - A Synthesis of Findings for OECD Countries.

This situation is the result of a longstanding historical process, which has resulted in a compromise between various issues and political orientations. This compromise remains rooted in a dual historical tradition: on the one hand family policy that began with the protection of children and assistance to children of deprived families, and on the other, the new post-World War II framework for social protection which made a point of safeguarding the incomes of families with children (and especially of those with large numbers of children) (Damon, 2006). The issue of fertility is also a traditional concern behind this support, but in the past decade it has been partly reshaped by the issue of reconciling the work-life balance. A consequence of this development is that present family policy is a compromise between different objectives and has inevitably become somewhat ambiguous as a result (Thévenon, 2006).

II.2. Income protection and fertility: two early orientations of family policy

Most analysts of the French family policy system have already highlighted its complexity. Basically, family policy is a package of no less than thirty different measures that aim to help parents at the time of a birth or to support them later in childrearing, to provide education, or to help them combine work and family life. It is of course difficult to draw clear tendencies from this complex system. Nevertheless, compared with many other OECD countries, the support received by parents in France has three distinguishing characteristics (Adema and Thévenon, 2008). First, most of the support is provided the State, while the contribution of employers is rather weak. Second, the types of support are very varied and comprehensive. Third, this support covers the entire childhood period.

As already stated, income transfers occurring through the tax and benefit system constitute the first pillar of support received by families. Cash family benefits are important since they represent about half the benefits paid to families (Chart 7). They were introduced

with the new social protection system in 1945 in a form that has hardly changed up to the present. Only families with at least two children receive the fixed, non means-tested benefits. The amount per child increases with the number of children. A variety of pre- and post-birth payments completes this (see Appendix 1). Transfers to families also occur through tax breaks granted by the "quotient familial" mechanism (a "family ratio" dependents' allowance) introduced into the income tax system in 1945. The transfers represent an important part of the support to families since they add about 0.7% of GDP — equivalent to one third of the total spending on families. This mechanism was designed to reduce the cost of raising children and provides tax reductions that are particularly important for families with at least three children or more. Since tax breaks are proportional to the basic taxable income, the quotient familial is especially beneficial to large richer families (see Box 1). It was explicitly designed as a motivation to boost fertility, and in particular to increase the propensity to have a third child (Thélot and Villac, 1998). The pro-natality argument continues to shape State family policy, although recent surveys have shown that this is no longer very well perceived in public opinion, and that the notion of children's rights is starting to replace it (Letablier et al., 2002). Moreover, the above-mentioned changes in fertility and conjugal behaviour (illustrated by the move to the two-child norm and the increase in the number of single parents) has given rise to a debate on the appropriateness of the family benefit concept and the quotient familial. Despite some attempts at reform, up to now no consensus has emerged that will fundamentally change the policy baseline.

Chart 7: Distribution of spending on families in 2005



Source: authors' calculations from data provided in CAS (2007), *Rapport sur un service public pour la petite enfance*,

<u>http://www.strategie.gouv.fr/IMG/pdf/Rapport_SPPE_VF14022007-2.pdf</u>. Tax breaks in the income tax system are not included in this distribution.

In the period just after World War II, support was mainly focused on large families and based on a traditional male-breadwinner household. The 1970s were characterized by the

increase in assistance to families with temporary economic or social difficulties and new benefits were created to help people facing social or family problems. These were reserved for a specific population and means-tested. Lone parents with children under the age of 3 could claim for a single-parent benefit called *Allocation pour Parent Isolé* (API). Housing benefits were also created during the 1970s, the amounts depending on the composition of the family. In 1972, a childcare benefit for working mothers was also established. The end of the 1970s marked a turning point because the focus of family policies gradually shifted away from fertility to the issue of reconciling work and family life.

Box 1: The "quotient familial"

This mechanism, original to France, is a "family ratio" dependent's allowance ("quotient familial") integrated to income tax. It operates as follows:

- If R is the household's taxable income;

- calculate a number N of units depending on the family size: one unit for each adult, 0.5 units for each child up to parity 2, 1 unit for each child after the third child or for the first child of a single-parent family (usually);

- the "family ratio" Q is equal to R divided by N;

- the marginal income tax t is an increasing function of Q, and not of R;

- the tax T owed by the household is equal to : t(Q)*R-v(Q)*N, where v(Q) is determined to ensure that there is no discontinuity in the function T(R) when N remains constant.

Hence the tax incentive to families is more than just a lump sum tax reduction per child, as would be the case if t and v depended on R and not on Q, but increases with the income R. An extra child gives rise to a lump sum tax reduction (0.5*v(Q) or v(Q) according to the rank of the new child), plus a reduction of t(Q) since Q decreases. However, "quotient familial" is not a tax credit as such: low income households who are exempt from income tax do not benefit from it at all, and households paying low income tax receive only a small tax reduction. Hence, because of its counter-redistributive effects, there is a ceiling for the amount of the tax reduction due to the "family ratio": $\in 2,200$ a year for a first or second child, $\notin 4,400$ a year for a child of parity 3 and over or for the first child of a one-parent family. However, the total "cost" – or rather loss to the State budget – of the "quotient familial" were estimated at 0.7 % of GDP in 2004 by means of micro-simulation models, or one third of the total amount of cash benefits for families. This confirms the crucial role played by the "quotient familial" in reducing the financial burden of families.

The rationale for such a mechanism lies in the 13th article of the Declaration of Human and Citizen's Rights of 1789, which is incorporated in the current French Constitution. This article states that tax owed by households must depend not just on income, but on their "contributory capacity". For a long time this notion has been interpreted as imposing a tax schedule that takes family size into account, and the French Constitutional Court has regularly reminded Parliament that it could not create a new tax or change an existing one without taking into account household income according to family size, and limiting the impact accordingly.

Source: Caussat (2006)

II.3. A growing but ambiguous focus on the work-life balance

Support to working mothers was developed in an ambivalent context caught between two movements: one that promoted family values and focused on large, traditional families, and the other, feminist, movement that claimed the individualization of social rights and the participation of women in the labour market (Commaille *et al.*, 2002; Revillard, 2006). The issue of reconciling work and family-life developed during the 1970s and 1980s. It added the development of childcare services to the education and development of children. Nevertheless, support to working women developed ambiguously, notably because family policy remained throughout and was conducted independently of policies for women's' rights and gender equality (Strobel, 2004).

This ambiguity grew during the 1980s and 1990s because family policy evolved in a context of strong budgetary restrictions, and was more directly subordinated to employment concerns. Some authors even argue that family policy was gradually shaped as an instrument of employment policies on two fronts: unemployment and the development of domestic and personal services (Martin et al., 1997; Fagnani, 2003). The Allocation Parentale d'Education was created to encourage working mothers to leave the labour market temporarily for childrearing (and thus reduce the job queue). Depending on their prior activity, Mothers with 3 children could obtain a fixed grant if they stopped working or switched to part-time work until their youngest child's third birthday. This benefit was extended to mothers with 2 children from 1994. The 2004 reform of the Prestation d'Accueil du Jeune Enfant (PAJE) extends the possibility for parents to interrupt their employment from the birth of the first child for a period of up to six months, with the possibility of extending this to three years for a second or a third child (see Box 2). In that case, parents receive the Complément de Libre *Choix d'Activité* (CLCA), a monthly amount of €22. Although this support is only provided for six months, the extension of parental leave support for the first child represents a significant paradigmatic change, since policies prior to that reform aimed rather to postpone the decision to work or to care after a second or a third birth (Thévenon, 2006). By contrast, women with one child were encouraged to remain in (full-time) employment given the high level of support through childcare and preschool services. In 2005, the amount spent on parental leave benefit (APE and CLCA) represented 9% of family support, approximately the same as the total amount spent on childcare and preschool structures by the State and the municipalities (Chart 7).

Box 2: The "Prestation d'Accueil du Jeune Enfant" (PAJE)

In 2004, support for families after the birth (or adoption) of a child was reformed. PAJE basically integrates many of the earlier benefits for the birth of a child and for individual childcare solutions into a single framework. Support previously granted in the event of career interruption to care for a second or third child was also extended to the first child.

Parents of children born before the 1 January 2004, continue to receive the benefits granted before the reform. Children born after 1st January 2004 receive the PAJE benefit paid in two-stages:

1) A basic allowance at birth. This is mean-tested and granted for a 3-year period. It replaces the previous *Allocation Parentale pour Jeune Enfant* (APJE) and the benefit received in case of adoption.

2) In addition to this basic allowance, households may receive a complementary benefit depending on their childcare solution:

•The *Complément de Mode de Garde* (CMG) is received if parents with children under the age of 6 continue to work and employ a registered childminder. This replaces the previous AFEAMA and AGED benefits.

•The *Complément de Libre Choix d'Activité* (CLCA) is granted to parents with a children under 3 years of age if they choose to work part-time or stop working. It replaces the *Allocation Parentale d'Education* (APE) and may now be granted after the birth of a *first* child for a limited period of 6 months, whereas the APE was only granted for a second or a third birth. The CLCA may be granted for a period of up to 3 years after a second or a third child.

•The *Complément Optionnel de Libre Choix d'Activité* (COLCA) was introduced in July 2006 to allow parents the possibility of leaving their employment for a shorter period, but paid at higher a rate. This benefit is available only from the birth of a third child.

Comparison of the monthly amount received with the CLCA and the COLCA:

CLCA (3 years):	354€ (if basic allowance is received)
	522€ (if basic allowance is not received
COLCA (1 year):	578€(if basic allowance is received)
	746€ (if basic allowance is not received)

If parents only reduce their working time, CMG and partial CLCA can be combined. In 2005, about 45% of children from birth to 3 years received individual childcare benefits.

At the same time, individualized and flexible home care services were developed, supported by tax reductions for households employing family carers at home, thereby reducing the cost of childcare and creating employment. Subsidised childminders, allowances and tax reductions for households paying childcare costs, were also introduced in the early 1980s. Since 1980, an allowance is paid to families with children aged under 3 (later extended to children under 6) who are cared for by a home-based registered childminder. In 1986, a tax allowance was introduced for families who employ nannies at home, i.e. richer families than those relying on the local crèche or a registered childminder. Such parents are eligible to deduct half the cost of childcare from their taxable income. The net tax reduction covers about 70% of the cost (Fagnani, 1998). This mechanism provides sizeable support to families since it represents about 10% of their spending.

II.4. Greater support for the poorest and richest families...

This brief historical presentation shows that transfers are multi-oriented. Some recent papers have attempted to evaluate how they benefit families with children compared to childless households. Overall they show that transfers are larger for families with a youngest child aged under 3, and more generous for bigger, better off families. Across all families, the average amount of child-related transfers is U-shaped (Chart 8; Bechtel, 2005): low-income families receive a higher amount per child than median earners, basically because of the means-test for the basic PAJE allowance but also because they receive higher amounts of social and housing assistance. By contrast, the tax-break mechanism of the "quotient familial" is clearly beneficial to richer households, and explains why the average support per child is much higher for them. In comparison with other OECD countries, the ratio of transfers received by low income families in France compared with high income ones, is relatively low and represents about half the OECD average (Adema and Thévenon, 2008).





Source: Bechtel et al. (2005); Simulation of the legislation in 2004 with income in 2001.

II.5. ... and to households with children under 3 years old and larger families

Globally, transfers received by families help reduce the income gap between households with and without children, and thus contribute to reducing income inequalities as well as the poverty rate. This fell to 7.2% after the transfers to families with children, from 21% before (Courtioux *et al.*, 2005). In the case of households with a child under the age of three, child support has increased together with primary income, as a result of the tax reduction on childcare costs. Because support increases with the number of children, transfers are greater for large families in France at all income levels, whereas it is proportional to the number of children in the majority of European countries (Math and Meilland, 2007).

Chart 9 compares the progressive increase of support according to the different childcare solution, by household income. It clearly illustrates the sharp increase in household income from CMG support when parents employ a registered childminder. For one-child families, the average support is clearly higher than the home care allowance (CLCA) for most of households whatever their position in the distribution of income. By contrast, the figure changes for families with two (or three) children: households in the first four deciles of income gain far more from the home care allowance than from the subsidies obtained to compensate childcare costs.



Chart 9: Childcare support by income level

Source: Bechtel et al. (2005); Simulation of the 2004 legislation with income in 2001.

II.6. A comprehensive provision of childcare services to reconcile work and family life.

Without taking into account the tax break for childcare costs, the effective tax rate of a second worker in the household is clearly below the OECD average, but the incentive for a second worker rather than an increase in the first earners' labour supply is especially low, given the "quotient conjugal" mechanism. The net cost paid by two working parents with two children using full-time care is, in terms of percentage of household net income, about the OECD average (Barber and Immervoll, 2005). Nevertheless, tax breaks contribute to reducing childcare costs as well as the differences in the cost of a place in a collective crèche and the employment of a registered childminder (Fagnani, 2003).

This support improves the work-life balance and completes the relatively comprehensive provision of childcare services provided by the system of public crèches, as well as the early enrolment of children in preschool (*écoles maternelles*). As already stated, investment in early childhood services is comparatively high in France, and represents almost one tenth of the total amount spent on families (Chart 10). The crèches are open for most of the day (7-8am to 6-7 pm) and are available immediately after the end of maternity leave, i.e. from the age of two or three months. That is very different from the situation in the Nordic countries, for instance, where collective public services are only available once the child is one year old.

The *écoles maternelles* are preschool institutions created in 1881, and considerable investment was carried out after the 1970s to increase the total number of places. The State is motivated to increase preschool capacity since it is relatively cheap compared to the cost of other childcare solutions (Adema and Thévenon, 2008). These preschools are free of charge for parents (except for the lunch) and often available for children from age two. They provide care support to working parents and are relatively compatible with full-time work since children are basically taken care of from 8.30-9 am to 11h30-12, then from 1.30 to 4.30 pm. Most of the preschools provide lunch and care after school hours (until 6-6.30 pm).

A 2002 survey on childcare estimated that although most children (61%) under three years old are looked after mainly by their parents during weekdays, 21% are cared for by subsidized childminders, 10% are in crèches, 7% cared for by grand-parents and only 1% by nannies at home (Blanpain, 2006). In the case of older preschool children, about 37% are enrolled in preschool at the age of 2 but 97% are enrolled from the age of 3 and there is universal coverage at age 4 — combined with other childcare solutions since only 14% of two-year olds attend school on a full-time basis, and 21% on a part-time basis. Most children can attend out-of school care from 4.30 to 6-6.30 pm, but about two thirds of the 2-6 year-old children are cared for by their parents after school and only 17% use the out-of school care facilities.

The contribution of the school system to childcare stretches beyond preschool. School days are relatively long in France compared with other European countries, and out-of-school care is frequently provided (Ananian and Bauer, 2007). In all, 56% of children in primary and secondary school have lunch at school, and 21% resort to after school care. The use of after school care is especially frequent when women work on Wednesdays. However, about one in five women care for their children on Wednesday even when they work all day, and almost 27% of children of school-age are cared for by their grand parents or another family member.

To summarize, one of the main characteristics of French family policy is the U-shaped financial support to families. It includes some anti-redistributive effects but has contributed to bringing poverty down to 7.2% compared with 21% of families with children before the

transfers. Income support is higher for families with three children and more, whereas support is generally proportional to the number of children in other European countries. Furthermore, comprehensive and diversified support for childcare is also granted to families with children aged under 3 through the provision of childcare and preschool services early in the child lifecycle, but also through subsidies for the various childcare solutions. However, this variety is not sufficient to alleviate the inequalities in childcare support or the use of formal assistance. Thus, women in the lower range of household income distribution are clearly encouraged to withdraw from the labour market to care for their children, while those with higher earning potential benefit from greater support to employ nannies and stay in employment.

III. The impact of policies on fertility and the work-life balance

Basically, the reason why family-friendly policies are expected to impact fertility is because they can reduce the cost of having children and improve the work–life balance. These policies include a large range of institutional instruments including tax credits, cash benefits, and other financial transfers that aim to limit the potential loss of well-being that the presence of children may produce in a household. Other benefits or transfers provide specific assistance for deprived families or support for housing; others still are directed at helping parents to reconcile work and family life, while benefits and tax allowances can be designed to help families to meet childcare costs. Childcare services and parental leave provisions are also of prime importance in giving parents the opportunity to combine employment with family and care responsibilities, and therefore impact the opportunity cost of motherhood. Those tax transfers or subsidies related to the labour market impact both the direct and the opportunity costs of children. In this case, policies can create reverse incentives on childbearing.

III.1. Some difficulties in measuring policy impact

In spite of these contrasted expectations, cross-country analyses suggest that total fertility rates are higher in countries with wider childcare availability, lower direct cost of having children, higher part-time availability of parents and longer leave. However, it is difficult to evaluate the precise impact of each of policy variable. For instance, it is difficult to measure and define the scope and borders of policies (Gauthier, 2007). One might argue that in some cases the whole institutional setting, rather than specific policies, make the country more child- or fertility-friendly. Thus, one has to restrict the conventional borders of policies to make tractable cross-country comparisons, or broaden them in order to capture any systemic coherence between them that is not framed by the same goals but may be of importance in the conciliation of fertility decisions with other aspects of life.

Another challenge is to capture the potentially complementary nature of instruments, i.e. the fact that one instrument only has an effective impact in combination with another, or if the associated support is above a given threshold. The effectiveness of policy instruments may depend on the existence of a multi-faceted and combined support in cash, service and time provided continuously over the childhood period to deal with the different aspects of childrearing and the evolution of needs over the family life-cycle. However, quantified information on the exact contribution of such institutional complementarities on fertility behaviour still remains to be found. Econometric evidence is far richer concerning the evaluation of the impact of more specific policy initiatives. These evaluations also face several difficulties:

• First, there are obvious time lags in the adjustment of reproductive behaviour to policy changes, and such lags make it difficult to assign the impact of specific instruments or specific policy changes.

• Second, both fertility and labour market behaviours are decided simultaneously and this may induce some endogenous explanatory variables, such as mothers' labour supply. This issue is now treated relatively well where longitudinal data are available

• A third difficulty lies in estimating the real cost of children, which varies according to the household's economic and demographic situations. Thus, most cross-country comparisons do not account for such inter-group heterogeneity and focus on average values. However, policy impact may vary across socio-demographic groups, such as ethnicity or socioeconomic status, and also according to the type of relationship between the parents (Sleebos, 2003). There may even be a polarized attitude or reaction to policies. The impact of policies also varies by birth parity, although most of the papers focus on aggregates figures.

• A related issue is to circumscribe the scope of policy measures since these can impact the behaviour of population subgroups not directly targeted by the measures. As we will see, parental leave payment paid to two-child families in France may have had a considerable impact on the behaviour of larger families. Moreover, very active policies, even targeting specific population groups, may act as a signal of support to families and influence a larger proportion of families by contagion.

• This possibility leads to a fifth difficulty: the potential endogeneity of policies. The development of family policies can surely boost fertility, but they may also be developed as a consequence of such a boost. Evidence from long-term series, for example in Sweden, shows that childcare policy has been developed in parallel to the expansion of female labour participation, but was not a pre-requisite to it (OECD, 2005).

• Last but not least, financial incentives are certainly not the only channel for policies to impact fertility decisions, and the evaluation of fertility responses to policies should consider the other channels. For instance, one effect of institutions is to reduce uncertainty and to enable people to make long-term commitments (such as childbearing). However, several conditions need to be met for them to have such an effect. A longstanding policy is necessary in order to maintain people's trust and convince them that no profound changes will occur in the future. A continuous and diversified policy is also needed to guarantee long-term support and create 'systemic' coherence. This is a key aspect in explaining France performance, and goes beyond financial incentives.

III.2. Some evidence from comparative studies: from the impact of financial incentives to the assessment of work-life balance policies

Given these obstacles, assessing the exact impact of family policies on fertility is an intricate business. One approach is by cross-country comparisons that investigate the effect of policies on fertility rates in industrialized countries. Most of these studies consider the aggregated level of TFR, and merge the data for all countries, even if they allow country-specific effects. They use either cross-section, time-series or longitudinal data.

In a survey published in 2003, Sleebos asserted that findings are often inconclusive or contradictory, partly because of methodological differences. However, a review of these studies suggests a positive but weak relationship between reproductive behaviour and family policy. The same dubitative statement is reiterated by Gauthier (2007). One obvious reason

for the lack of evidence is that the influence of policies can only be detected in the long-term. However, both authors point out that the more obvious and robust results concern the impact of cash benefit and transfers, whereas the impact of work-related policies is more contradictory: the duration and payment of maternity leave generally have a rather weak impact, whereas some studies conclude that childcare availability and/or affordability have a greater one. Flexible working hours and the availability of part-time work are important factors influencing fertility. Thus, a key issue for fertility decisions appears to be the possibility of combining a family with work. For that reason, attention should be paid to policies that aim at reconciling work and family life.

Among the most significant studies assessing the impact of cash transfers, Blanchet and Ekert-Jaffé (1994) investigate the effect of family benefits on the TFR of 11 industrialized countries in the period from 1970 to 1983. They construct a family policy index that accounts the global generosity of financial support through cash benefits, tax relief, and parental leave compensation, and found that such a package had a fairly weak impact, and that French family policy could lead to an extra 0.17 child per women compared with other developed countries such as the UK. Such an impact is not insignificant, but shows that that no major fertility upswing may be expected from family policies.

Gauthier and Hatzius (1997) modelled the dynamic relation between fertility rates and policies for 22 OECD countries over the period 1970-1990. They found that neither the duration of benefits nor the maternity benefits themselves appeared to be significantly related to fertility. By contrast, direct cash benefits were found to have a positive and significant effect, albeit a small one. The authors also considered the differences in policy impact according to birth parity and found that benefits had a greater effect for the first child. One of their conclusions was that targeting benefits on the third child, as is the case in France, is unlikely to increase fertility. Overall, the magnitude of the effect is therefore small, since they estimate that a 25% increase in family allowances would result in an average fertility increase of about 0.07 children per woman. However, they also observed differences in the responsiveness across groups of countries. Basically, a greater impact was found in Scandinavian countries and was interpreted as the effect of the co-variation of in-kind support in these countries. Thus the authors (indirectly) stress the importance of institutional complementarities although they could not quantify it directly.

Comparing changes in cross-section data, Castles (2003) argues that the provision of child-care facilities for children aged 0-3, which is crucial to early re-entry into the labour force, may have been the main factor contributing to the reversal of the relationship between fertility rates and female labour market participation in OECD countries. Micro-evaluation evidence is, however, more mitigated. While the positive impact on fertility of reduced childcare cost and increased childcare availability was estimated by Di Prete *et al.* (2003) and Del Boca *et al.* (2007), no statistically significant impact on childcare characteristics was reported for example by Ronsen (2004) for Norway and Finland, Hank and Kreyenfed (2003) for Germany or by Andersson *et al.* (2004) for Sweden.

More recent studies confirm the impact of standard family policy and provide evidence of their effect on the labour market and work organization. D'Addio and Mira d'Ercole (2005) analysed cross-country differences in total fertility rates in 1999 for 19 OECD countries. Their investigation was based on models that allow for dynamic effects, potential heterogeneity between countries, and endogeneity of some of the explanatory variables. They find evidence that transfers to families with children, as well as the provision of services to working parents to help them cope with their care responsibilities, have a positive impact on childbearing. The impact is, however, relatively weak: a one-week increase in the total length of parental leave in the percentage of wages replaced and transfers to families would on average increase the total fertility rate by 0.3%, 0.9% and 1% respectively. The study also suggested that female labour market participation, the share of women in part-time work, and the ratio of female to male hourly earnings, all have a positive impact on fertility.

Del Boca *et al.* (2007) also modelled the role of childcare arrangement, parental leave, family allowances and labour market flexibility, but adopted an individual-based approach by and on women's decisions on fertility and labour supply. Their results based on the ECHP show that a non-negligible portion of the differences in labour force participation and fertility rates of women in six European countries (including France) can be attributed to the differences in institutions, but the impact varies according to educational levels. Childcare availability and optional leave have larger impacts on fertility and participation decisions at lower educational levels. The parameter significance on fertility is, however, weak. By contrast, labour market policies, such as opportunities for part-time employment have a greater impact on women with higher education. In all cases, the impact is more significant and greater on the labour supply than on fertility.

When assessing the effectiveness of policies in raising fertility levels, an important issue is also whether these policies impact the "completed" fertility rates or only the timing of births. In the first case, policies would have a long-term effect, but only a temporary one in the second. Studies that attempt to distinguish between the two using age- and parity-specific fertility rates, tend to conclude that the impact is more significant on the timing of fertility rather than on the total number of children (Sleebos, 2003). For example, Andersson (2001) suggests that the introduction of a "speed premium" in the Swedish parental leave system has accelerated childbearing decisions by reducing the spacing between first and second births.

III.3. Some evidence for France at the crossroads of literature on fertility and female labour market behaviour

Only a limited number of the papers investigating the impact of family-oriented policies on fertility in France can be used to interpret the above-mentioned specificities in fertility trends. Contrary to the comparative studies we have discussed, most of the analyses on France are based on micro-behaviour and individual data. Some of these studies have focused on the impact of income support on fertility. They consider either the total income support taken as one set, or the incidence of tax breaks on fertility. Other, more recent studies have considered the effect of specific work-related policy measures on fertility and female labour market participation. In particular, many studies have focused on the incidence of the parental leave benefit (the APE) on female labour market behaviour, but only one of them focused on childbearing. Many studies also analyse the impact of childcare characteristics (cost and availability) on the female labour supply, but to our knowledge, none have investigated their specific impact on fertility. Nevertheless, these papers shed light on the relatively comprehensive support that has helped many women combine full-time work with the birth of a first child. Policies that secure the conciliation between labour market participation and first motherhood do appear to be very important. There are, however, no studies specifically investigating the role of flexible working hours or part-time work on fertility.

III.4. A rather weak impact of financial incentives, except for higher parity births

Ekert (1986) was among the first studies to estimate the impact of financial (non work-related) transfers to families on fertility. Ekert evaluated the incidence of direct cash benefits

(including the "universal" *allocations familiales*, the means-tested *complément familial*, and housing benefits) on fertility in the late 1970s and observed a significant but weak impact since their contribution to fertility rates represented about 0.2 children per woman. The author estimated that full payment of child-related costs would increase fertility by a mere 0.3 children per woman. As stated previously, Blanchet and Ekert (1994) found a similar impact from a cross-country comparison.

Ekert *et al.* (2002) also suggested that family policy is an important factor that reduces differences in fertility behaviour between socio-professional categories, especially compared with countries like the UK. Nevertheless, the majority of women become mothers in France, and the propensity to have a second child depends very little on social categories. The polarization of fertility behaviour across social groups is far more important, and starts from the first child in the UK where support for families and working mothers is far less developed.

A more recent paper by Landais (2003) scrutinises the impact of the *quotient familial* on fertility at parity 3. To do so, he estimated the impact of a 1981 change in tax legislation that considered a third child as a full adult for tax purposes, instead of half an adult in the tax allowance calculation (see box). He also concluded that there was a positive but very weak impact: a 1% variation in tax breaks for households with three children produced a relative proportionate increase of less than 0.05%. Landais also observed that the sensitivity of fertility behaviour to tax incentives increases with income (and thus the magnitude of the incentive). There is, however, a time lag of between 5 and 10 years before the effects are fully disseminated and can be evaluated.

III.5. The 1994 parental leave reform: a limited (positive) impact on fertility...

Breton and Prioux (2005) also investigated the role of family policies on the transition from two to three children. They concluded that the measures targeting the third child had a visible impact on the timing of birth. These measures may also have contributed to the stability or even the slight increase in the probability of having a third child, especially with the *Allocation Parentale d'Education* introduced in 1985. This probability has decreased as policy support has moved from focusing on the third birth to the second. The authors observed the same cyclical variations of the probability of having a second and third child during the 1970-2000 period, but a greater magnitude later when support for 3-child families was increased. However, they could not quantify this impact without predicting what would have happened without the policy changes. Stating the relatively similar cyclical trends of the probability of having a child at parity 2 and 3, they suggested that policy may have had an impact beyond its target (families with 3 children), i.e. on fertility behaviour at lower parity, by the contagion effect from the secure climate created by the policy and the widespread communications campaigns that accompanied the reforms.



Chart 10: Policy support for a second and third child and associated fertility trends

Source: Breton and Prioux (2005)

Laroque and Salanié (2004; 2005) investigated the role of financial incentives through tax and benefit transfers received by families. They used a micro-simulation model with endogenous female labour force participation and the fertility response to financial incentives. However, their two papers produced rather different and sometimes contradictory results. Basically, Laroque and Salanié (2005) stressed two main differences. The first was that the time horizon of benefits reception was not sufficiently taken into account. Second was that they included fewer variables in the fertility equation in the first generation of papers. Thus, the early results were marred by bias from omitted variables and, according to the authors, the 2005 publication provides more reliable estimates. For that reason, we will only consider the results of the later publication that provides *ex ante* micro-simulations of the impact of the financial transfers received by families. Here again, the impact of financial support is significant but relatively weak. In all, the costing elasticity of the "demand" of children is estimated at 0.2; a 25% reduction of the cost of children would increase fertility by only 5%. However, the responsiveness of fertility behaviour varies with birth parity: the higher the rank of birth, the more sensitive the fertility behaviour to financial variations. Thus for example, the estimated increased incentives to mothers of a second child to leave the labour market that occurred through the extension of the APE, would have increased the number of births by 3.7%, representing an increase of 10.9% in births at parity 2, reduced by a 2.4% fall of the number of births at parity 3 because the birth of a third child then became less attractive¹.

However robust their estimation, one should be cautious in using these results to assess the effectiveness of financial incentives on fertility behaviour. Some restrictions on the sample design² and on the fertility equation can be questioned. Moreover, *ex ante* simulations are certainly insufficient to assess the impact of policies, and must be complemented by *ex post* studies based on actual behaviours.

¹ Note, however, that this result is in contradiction to their previous paper, where they estimated that financial incentives would have a considerable influence on fertility at parity one, but none for two-child or larger families (Laroque and Salanié, 2004).

² For instance, the sample did not include households with a retiree, a self-employed person or a civil servant; it also focused on women who had left school for more than two years, to avoid dealing with the schooling vs. work decision.

In this perspective, Piketty (2005) also aimed to quantify the incidence of parental leave compensation (APE) on both fertility and women's' labour supply in an *ex post* evaluation using both labour force surveys and the 1999 Family Survey. The extension of the grant for the birth of a second child in 1994 served as a natural experiment. Here, the challenge was to control for possible windfall effects, i.e. for the fact that some women would have had a child or left the labour market without the change in the legislation. The effects on fertility are hard to quantify, but Piketty argues that the extension of the APE would have not explained more than 20-30% of the increase in the total number of birth observed from 1994 to 2001 (at maximum 10% of rank 3 births and between 10% and 20% of rank 2)

III.6. ...but a larger (negative) impact on female labour market participation

According to Piketty's results, the effects on female labour force participation are more spectacular. Indeed, the payment of the APE to mothers with two children (with the youngest under 3 years of age) would have induced between 100,000 and 150,000 withdrawals from the labour market. Thus, between 50% and 70% of the 220,000 full rate APE recipients would not have interrupted their activity at the second birth if they had not received the benefit.

The author also pointed out the cumulative effect, since receiving the APE for a second birth appears to have induced some 50,000 mothers with 3 children to leave the labour market after the third birth. Thus, the APE reform would have resulted in a total of 150,000 and 200,000 interruptions of female labour market participation. Moschion (2007) argues that women have anticipated their labour market withdrawal: before 1994, mothers left their jobs after a third child; after 1994 they were more likely to do so after second. She concludes that this effect may prove the role of financial incentives.

Finally, Piketty's results also showed that mothers with two children do not seem to have suffered from particular difficulties in returning to the labour market since their probability of working increased over the period. A similar conclusion was reached by Thévenon (2007) who observed that the probability of being active (full-time) increased in about the same proportion as for childless women or mothers with one child in the period 1996-2005, after a lag that may be explained by the extension of the APE.

III.7. A rather large number of women in full-time employment before the birth of a second child

This trend illustrates the specific situation in France of female employment and family-life conciliation. Compared to other OECD and European countries, the employment rate of women aged between 15 to 64 years is just above the OECD average at 58.6%. If we look at the correlation between the fertility period and female employment rates in 2005, we can see that compared to other countries with same rate of female employment, the fertility rate in France is relatively high (especially compared to continental, southern or eastern European countries, Korea and Japan). Of course, the correlation can viewed the other way round with the less positive interpretation that, for a given fertility rate, the female employment rate is lower in France than in Nordic European and Anglo-Saxon countries (US, Australia, New-Zealand and the UK). However, one difference with this last group of countries is that full-time employment remains a wide normative basis in France, although part-time work rose significantly during the 1990s (Thévenon, 2007). In France, as in Denmark, Canada, Finland, Portugal or Sweden, the most frequent situation is clearly both parents in full-time employment (Aliaga, 2005; Adema and Thévenon, 2008). One aspect, compared to other continental European countries, is how the labour market behaviour of

French women adjusts to each stage in the family formation process (Thévenon, 2006). The incidence of the first birth is very weak on the exit from the labour market, and weaker than higher parity births (Thévenon, 1999). Furthermore, the full-time employment rate is more sensitive to the number of children, and especially to the presence of a third child, than to the age of those children. Part-time work concerns mothers with two or three children, and implies relatively long working hours compared with other European countries (Thévenon, 2007; Chaupain-Guillot *et al.*, 2007).

III.8. Childcare costs have more impact on the use of paid care than on the female labour supply

In this context, it is important to consider policies that primarily affect the female labour supply where it is not possible to consider simultaneously their potential induced impact on fertility³. In that case, most studies limit their investigation to the effect of institutional variations on the use of policy measures and the female labour supply. Only a limited number of such studies exists in France and these mostly study the impact of childcare costs on the demand for formal paid childcare and the female labour supply. Choné *et al.* (2004) found that overall, childcare cost impacted the use of paid care but had only a very low incidence on female labour market participation. These costs, together with the female potential wages, have a stronger and more significant effect on working hours. These estimates show that withdrawal of the APE at parity 2 would have a significant impact on the female labour participation (+11% of women with 2 children with the youngest aged under 3) and on the use of formal paid childcare (+4%). However, the global impact on the employment rate would be moderate with an increase of about 4% due the relatively small share of population concerned by the APE. By contrast, tax reductions related to childcare costs would only have a limited impact.

III.9. A probable (but uncertain) effect of early preschool enrolment of children on full-time female labour supply

Two very recent studies also investigate the role of early preschool enrolment on the female labour supply. Results, however, are rather uncertain. De Curraize (2005) analyzes the incidence of early school enrolment (at age 2) on the duration of the mother's interruption of labour market participation and finds it impossible to conclude there is a positive effect. Moschion (2007) finds that providing mothers of two-year old children with developed childcare facilities modifies the effect of fertility on the mothers' labour supply and may have a positive impact on combining work and family life. In particular, Moschion finds that having more than two children has a negative effect on labour force participation and hours worked in French *départements* with relatively low rates of enrolment of 2-year olds. Conversely the effects are positive in *départments* where the preschool enrolment is high. However, the estimates are not significant because of the lack of precision, and should therefore be interpreted cautiously. Nevertheless, comparative studies suggest that preschool entry of 3 year-old children is a turning point since there is subsequently a significant increase in the full-time female employment rate — a higher increase than that observed at a later period of childhood (Thévenon, 2007).

³ Because of the vast number of structural determinants that would have to be considered, as well as the lack of data, it is often impossible to consider simultaneously the impact on fertility and the labour supply, taken as joint decisions.

Conclusion: towards a broader policy impact approach to fertility regulation?

As stated in the first part of this paper, France has relatively high period fertility rates compared to other European countries, and this has increased significantly since the mid-1990s. The rate even appears quite stable after controlling for tempo effects. Thus, the increase in the TFR seems to reflect some sort of catch-up effect from women who had postponed childbearing. In a longer-term perspective, the decrease in completed fertility refers to the growing standardization of fertility behaviour at two children. The proportion of women remaining childless in France is also lower than in many other European countries.

Family policies do contribute to women becoming mothers and combining motherhood with work. On the one hand, financial transfers through cash benefits and tax allowances reduce the "cost" of children but their direct effect on fertility is estimated to be weak. On the other hand, substantial support is also provided to families with children under the age of 3 or 6 years to alleviate the cost of childcare, and the literature suggests a large responsiveness on the part of the female labour market and a coordination of family formation to this financial support. However, the financial aspect is certainly only one part of the story to account for the 'stylised facts' reviewed in the paper. For instance, one reason why childlessness is less frequent in France is certainly that the birth of a first child is more compatible with employment, even full-time employment, and does not hinder future career development. One argument for this is that employment stability increasingly appears to be a precondition to having a first child (Toulemon and Leridon, 1999; Méron and Widmer, 2002). Thus, empirical evidence shows that women who experienced a period of unemployment postponed the birth of the first child, compared to both inactive and employed women, and this is more prevalent for less qualified women and younger cohorts (Méron and Widmer, 2002). Among the individuals who intend to have a child, the experience of unemployment also reduced the probability to carry out their intention within a five year period (Toulemon and Testa, 2005).

The more frequent (or more rapid) entry to first motherhood in France may be explained by the fairly comprehensive support received by women for combining motherhood with full-time labour market participation. As stated in the second part of this paper, this support is relatively diversified in terms of financial benefits and provision of services, and is also continuous over the childhood period (Adema and Thévenon, 2008). Such comprehensive support is likely to adjust to family needs and secure the transition to motherhood and employment. It is also one reason why women do not forgo having a second or a third child, and explains why the decision to have children or to be in employment is less polarized by socioeconomic status in France than in elsewhere (Thévenon, 2004).

However, it is tricky to identify and quantify to what extent policies contribute to establishing such a secure climate. In order to really understand the processes involved, it may be necessary to investigate further to find out if and how labour market flexibility (i.e. flexitime or part-time, as well as increased mobility between jobs observed during lifetime careers) adds or reduces the uncertainty that leads couples to postpone births. There is, to our knowledge, only one study with very preliminary results on the impact of working conditions on fertility intentions. Cette *et al.* (2005) suggest that the organization of working life influences the intended number of children more significantly for individuals with a higher socioeconomic status. The higher the household income, the weaker the impact on working conditions. The lack of time and of predictable working hours would influence the timing of childbearing.

We may also need to obtain a better understand of the role of institutions as a "filter" that can modify the impact of an uncertain environment over the life-course between different populations group (Blossfeld *et al.*, 2004). This is an important issue since we observe that highly educated individuals achieve their fertility intention more frequently, whether or not they intend to a child (Toulemon and Testa, 2005). More fundamentally, one challenge is to better understand how micro-level determinants of the life-course, and macro-conditions and institutions interact to shape the transition into parenthood (Billari, 2004). This means that we need to identify how institutions measure the incidence of macro-level situations on micro-level factors. We also need to identify the extent to which the effective impact of family policy is conditional to the complementarity of family support over the life-course, and thus how such complementarities shapes the transition into motherhood.

However, even such a sophisticated framework would be misleading for understanding the fertility situation in France without taking into account the relatively positive attitude towards family in that country, as observed by Testa and Grilli (2006) in their European comparison of fertility preferences. As highlighted by Toulemon *et al.* (2008), 95% of French people want at least one child, which is very similar to the high proportion in other European countries except in continental Europe. There are, however, regional disparities since the "preference" for children is more widespread in southern regions, which is interpreted by Toulemon *and al.* (2008) as an indication that French fertility ideals are linked to its cultural past (southern regions being more representative of that past). By contrast, the ideal number of children among people who confirmed their willingness to have a child is extremely high in France, with the highest score at 2.34 (just behind Ireland), and less heterogeneous between regions. As argued by the authors, this positive attitude towards large families may be partly nurtured by the multi-faceted French family policy.

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Short	Medium	Long	
1915-19	2.831	2.492	2.225
1920-24	2.721	2.468	2.115
1925-29	2.954	2.62	2.129
1930-34	2.985	2.621	2.228
1935-39	2.796	2.4	2.113
1940-44	2.738	2.211	1.943
1945-49	2.567	2.068	1.894
1950-54	2.411	1.988	1.813
1955-59	2.425	1.968	1.854
1915-19	2.683	2.471	2.307
1920-24	2.649	2.407	2.309
1925-29	2.655	2.443	2.324
1930-34	2.466	2.346	2.21
1935-39	2.446	2.282	2.116
1940-44	2.39	2.097	2.09
1945-49	2.18	1.975	2.031
1950-54	2.11	1.941	1.962
1955-59	1.899	1.797	1.833



Tax breaks towards family — OECD-24 (2.4%)







