Fertility: Is there a French model?

Dominique Méda and Ariane Pailhé

Abstract:

Since the end of the 1990s, France is experiencing a "baby boom". In 2006, the total fertility rate was two children per woman: it is very close to the "replacement level". The article tries to explain this French specificity. Since 1996, fertility at young ages has ceased to decline and fertility at higher ages has continued to increase. One explanation of these high fertility rates is the low proportion of women without child and the fact that French women are more numerous than women from other countries among those who give birth to a first child, and to give birth to a second and to a third child. Four great reasons might explain the French singularity: the active family policy; the development of *écoles maternelles*; the measures to promote reconciliation between work and family and the fact that French people give great importance to the family.

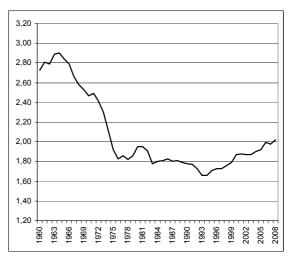
1. The French exception

As of 1 January 2007, France is the second most densely populated in European Union, just behind Germany (82.3 millions people) and before Great Britain and Italy (respectively 60.9 and 59.1 millions people). The population of France (mainland and overseas) accounts for 13.6 % of the European population.

Since the beginning of the 1960s, France has known the same evolutions that have occurred in Nordic countries some years before. The total fertility rate (TFR) decreased from 2.9 children per woman in the first half of the 1960s, to fewer than 2.5 children per woman in 1970 and fewer than 2 in 1975 (Figure 1). It stabilized in the 1980s and reached its lowest level in 1994. At this moment, it was 1.66 children per woman. During the seventies, France has also experienced other big demographic and social changes in family behavior: in addition to the decrease of the current fertility level, entry into parenthood has been delayed, marriage has declined, while births outside marriage increased.

But since the end of the 1990s, France is experiencing a different way: fertility has begun to increase clearly since 1996. This increase is called "baby boom," in particular at the end of the 1990s. The total fertility rate has remained stable since this time. In 2006, 796,900 births were recorded in France (mainland) and 33,400 in the overseas departments, i.e. a total number of 830,300 newborns. The number of women aged 20-40 who give birth to more than 95% of the children is decreasing, but women have more children than before: the TFR is rising. In 2006, the TFR was 2 children per woman: it is very close to the "replacement level" of 2.1 children per woman (Richet-Mastain, 2007). It is the highest level for 30 years and the highest level in the European Union. France is the most fertile country in Europe, with Ireland. Fertility is much lower in Southern and Eastern European countries.

Figure 1: Total Fertility Rate since 1960 in France



Sources: INSEE, civil registration data. Daguet, 2002; INSEE, 2009; Toulemon, Mazuy, 2001

But the context of this so-called "baby-boom" has to be further clarified. Like other European countries, the number of marriages has dramatically declined while unmarried cohabitation has risen. This decline in marriage did not have any impact on fertility. Today, marriage is not a prerequisite for having a child. In 1970, the proportion of births outside marriage was just 6%; it reaches almost 50% today and this proportion of extra-marital births is one of the highest in Europe.

As elsewhere in Europe, entry into parenthood has been delayed and the timing of fertility is changing rapidly. The fertility schedule is moving continuously to higher ages and the mean age at childbirth is continuing to rise (Table 1). The mean age at first childbirth has increased since the mid-1970s; it was 23.9 in 1975 and reached 27.8 years in 2006. This increase results both from a decrease in fertility at young ages (before 25) and an increase at ages 28 and over. As the age gap between births is stableⁱ, this postponement of first childbirth

affects the average age at birth of all parities. The mean age at childbirth is today 29.8 years instead of 29.1 ten years ago and 27.7 years twenty years ago. In 2006, in metropolitan France, 52.8% of newborn children had a mother who is at least thirty years old. They were only 45.8% in 1996.

 Table 1: Changes in mean age at maternity

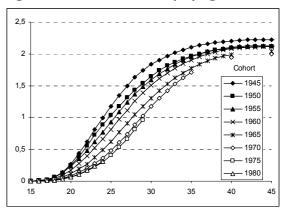
Mean age at maternity (total)	Mean age at maternity (first birth)
27,2	23,9
26,8	24,5
28,3	26,0
29,4	27,4
29,5	27,6
29,8	27,8
	27,2 26,8 28,3 29,4 29,5

Source: Recent demographic developments in France. Population, 3, 2008 and Bilan démographique, Insee, 2008.

However, unlike the other European countries, this postponement of fertility had little impact on completed fertility. The cohort total fertility, which measures the average number of births that a woman born in a particular year has had by the end of her reproductive life, is also among the highest in Europe. In metropolitan France, women who have ended their fertile life have had on average more than two children: the women born in 1957, who turned 50 in 2007 had 2.14 children on average (Figure 2). When they were 40 years old they have already had 2.10 children and 1.95 children when they were 35 years old. Women born in 1967 have had only 1.75 children when they were 35 years old, but they have caught up; they have had 1.97 children when they were 40 years old (Pla, 2008). In the end, one of the explications of the French trend is the increase of fertility at higher ages: since 1996, fertility at young ages has ceased to decline and fertility at higher ages has continued to increase. "But, it's possible that the postponement of childbirth is reaching its limits" (Bac, Legendre and Thibault, 2006). As fertility is still increasing at higher ages, the total fertility rate is increasing too and cohort fertility could stabilize for cohorts born after 1970. According to Prioux (2005), the cohort completed fertility could stabilize at 2.0 children per woman. Anyway, it is unlikely that it will fall below the level of 1.9.

Toulemon, Pailhé and Rosier (2008) and Prioux (2005) have shown that one of the explanations for the high and stable level of French fertility is the fact that the proportion of women without child has remained very low: only 11% of women born in 1970 will remain childless and "the probability of a progression to a second, a third and a fourth child has not changed since 1975" (Toulemon, Pailhé and Rosier, 2008). In the end, French women are more numerous than women from other countries among those who give birth to a first child, and to give birth to a second and to a third child (Prioux, 2005). This stable average fertility is due to a stable distribution of family size (Toulemon, Pailhé and Rossier, 2008). Finally, the norm is the two-child family (Regnier-Loilier, 2006). Most people opt for two children (41% of women born in 1970).

Figure 2: Cumulative fertility by age



Source: Toulemon, Pailhé and Rosier (2008)

A noticeable characteristic of French fertility is its homogeneity by education level and social class. The most educated women have fewer children than the less educated ones (women belonging to the generation born in 1955-59 have respectively 1.85 children and 2.42 children in average). But the differences are small compared with other European countries where there is much more polarization according to education level (Toulemon, Pailhé and Rossier, 2008). For instance, in Great Britain, a large share of the most educated women remains childless (Ekert-jaffé *et al.*, 2002). So in the long run, the improvement of women's education level has not induced a large decrease of fertility.

2. Why does France have a high level of fertility?

A first explanation has to be excluded: for some people, the French exception could be explained by the proportion of foreign women in the population. Indeed, 4.9 million foreign-born immigrants are living in France (8% of the country's population) and the number of French citizens with foreign origins is generally thought to be around 6.7 million. And it's true that the fertility of foreign women is higher than that of natives. But Héran and Pison (2007) have shown that the total fertility of foreign women is 1.1 children more than women born in France: In 1998, French mothers have 1.7 children per woman and foreign mothers 2.8, i.e. a difference of 1.1 children. For the population as a whole, the fertility rate in France was close to 1.8. This means that foreign mothers added less than 0.1 children to the national rate. "Foreign women represented only 7% of the female population of childbearing age, so their additional child contributed to the national fertility rate by a proportion of only 7%, i.e. 0.07 children." The difference in terms of fertility between native French women and all immigrant women (including women who have acquired French nationality) is narrower. Naturalized immigrant women have often been in France for many years or arrived at an early age, they are more frequently in mixed unions and more closely resemble native French women. They have, in 2005, 2.1 children on average, compared with 2.6 for immigrant women as a whole and 3.3 for foreign women. Thus, their impact on the country's fertility rate is more limited. Finally, the authors conclude that "With or without immigration, French fertility is among the highest in Europe."

The French active family policy might likely explain the high level of fertility in France. France has a long tradition of family policy. It should be reminded that during the late 19th and early 20th centuries, France became the first country in the world to experience demographic decline and that on one hand, a strong pro-natalist movement defended family values over the 20th century and that, on another hand, most people agree with the intervention of the state in these issues. Between the First and the Second World Wars, policies have been implemented in order to incite women to have more children. Just before the Second World War, a special allowance was created for non-working women who had more than two children. This policy reinforced the non-working mother pattern; it disappeared only in 1978. The family policy finally implemented after the Second World War was a compromise between a Catholic vision of the family and more progressive ideals of social equity. For example, the entire policy was based on the male breadwinner and female caregiver pattern, but the development of kindergartens, introduced at the same time, was meant to promote equal opportunities among French children. Starting from the beginning of the 1970s, the policy towards families is becoming more favorable for active women. An allowance was created to help women to find solutions to combine work and family. Collective and private care arrangements were developed for children under 3, helping women to reconcile family and work.

Current French family policy is a result of a compromise between various political trends. Up to 2007, the yearly Conférence de la famille was the place where the new family policy measures were set out. Extensive dialogue with family movement associations, social protection bodies, union and management elected representatives and experts precedes this conference. Religious institutions play a rather minor role. In 2008, the new French government has declared its intention to replace it by a new *Haut conseil de la famille* with a prominent role given to family movement associations.

This intervention of the State in the private sphere has long been accepted as legitimate: the State is perceived as the main stakeholder responsible for children (Letablier, Pennec, Büttner, 2003). The consensus on the importance of the family and State intervention goes beyond the political divide between the right and the left. However, there are divergences. Left-wing parties consider that family policy should be directed towards the poorest and adapt to changes in the family and behaviour. Gender equality considerations have recently been advanced. Right-wing parties exhibit their pro-natalist views more openly. Family policy should both allow women to raise their children and increase the number of children. Moreover, right-wing parties argue for universal coverage for family policy, which should be distinguished from social policy. In spite of a relatively high level of fertility compared with other European countries, the pro-birth tendency is still present in the political arena. It is more present in right-wing parties, but it is also deeply rooted in some left-wing parties. This tendency expresses both family and collective morality, and is more rationalistic than religious (Büttner, Letablier, Pennec, 2002). Its supporters are still anxious about the insufficient replacement of generations, and argue for increased support for families, particularly large families (Godet, Sullerot, 2006; Franco, 2006).

Current concerns have gradually shifted from the number of births to reconciling work and family (Ministère de la famille, 2005). Family policy is designed to encourage mothers' "free choice" to keep on working or stop working to raise their children. The idea is that women should not be penalized whatever their choice and that public policies should help women to get the number of children they intend to have.

Actually, France has a rather generous and diversified family benefit system. Several measures have been designed to reduce the cost of children. As in southern countries, these allowances are directed specifically towards families that have three or more children (Breton, Prioux 2005). Universal family benefits are available, but in France they are available only from the second child and are progressive. Several means-tested allowances are also available. On the other hand, a special tax rule named *quotient familial* favors families that have at least three children and that pay taxes. The French tax system is not individual-based but family-based and from the third child, each additional child counts for one tax unit (instead of one half before), which leads to significant tax deductions. This measure is a purely pro-birth one.ⁱⁱ Finally, public expenditure on the family is quite high: according to Eurostat data, it was 2.8% of GDP in 2003, which is higher than the EU-25 average (2.1%) behind only Denmark, Sweden, Finland, Luxemburg and Germany. However, the Eurostat nomenclature does not take into account all benefits for families (such as fiscal support or early schooling). Including fiscal support for families, the state contribution is estimated to be 3.6% of the GDP (Bechtel et al., 2005). Hence, France may be seen as the European country with the most substantial family policy (Adema and Ladaique, 2005).

But public expenditure on the family isn't

enough to explain the French level of fertility. In fact, Germany, for example, has high spending but a low current fertility rate. The type of expenditure is more of a determinant than their amount. In France, attitudes towards female work are positive: according to CREDOC opinion surveys, in 2004 only 17% of French people think that women should not work while their children are young. More than 60% think that women should have the free choice of working or not. So the dominant model is the two-career one: among couples aged 20-49 where at least one partner has a job, both partners have jobs in 70% of cases; the man is the sole earner in 25% of couples; the woman is the sole earner in 5% of couples (Aliaga, 2005). What matters is the possibility for women (and men) to combine concretely work and family. The French family policy has been reformed at the end of the 1970s and the 1980s to allow women to continue to work by giving birth to children. Several kinds of measures have been developed like paid parental leaves, tax breaks and subsidized daycare. The number of crèches has increased since 1983. Likewise, the number of nursery assistants who keep children at their home. Since 1980, an allowance is paid to families with children under three years old who are cared for at the home of a registered childminder. In 1986, another allowance was paid for people who hire a nanny to look after their children at their home. From 1994, families who employ someone to look after their children after school or on Wednesdays may also claim tax deductions.

The most important is without a doubt the development of écoles maternelles (nursery schools). These nursery schools were created in 1881 for poor women who were obliged to work. These schools became more and more popular during the 20th century. It is a separately organized and administered elementary school which provides educational experiences to children aged from two (or three) to six years old under the direction of professionally qualified teachers. School hours are from 8:30 to 16:30 and care facilities are provided before and after school hours from 7:00 to 19:00. School meals are available during lunchtime. The most important is that this kind of school is free of charge and of high quality. It allows all women to combine work and motherhood and is able to reduce the inequalities between children of different social origins by ensuring that they have possible equal opportunities. Almost all children who are three years old are at the nursery school and a quarter of children age two. It is certainly

one of the most solid explanations for the high French female participation in the labor force and consequently for the high level of French fertility.

In fact, we have to remind ourselves that there has been, since the mid-1980s, a strong correlation between women's activity rates and fertility rates (Ahn and Mira, 2002). The countries where the participation of women in the labor force and activity rates are high are also those with the highest fertility rates (and vice versa). It seems that there is a strong correlation between facilities which have been provided to women to combine work and family in some countries and the high levels of current fertility in the same countries: Nordic states and France have the highest fertility rates and more developed family-friendly policies. High female employment can be combined with relatively high fertility when policies facilitate the combination of paid work and parenthood (Bernhard, 1993; Brewster and Rindfuss, 2000). It matters to understand that when women cannot combine work and family, most of them prefer to give up having a baby. It has been the case since the beginning of the seventies, with the increase of female participation in the labor force. The change began with women born after 1950 (Labourie-Racapé, Letablier and Vasseur, 1977): the activity rate of women aged 25 to 49 was 41.5% in 1962 but 44.4% in 1968, 54% in 1975 and 85.6% today. The big change is that before women stopped working when they gave birth to a child. This behavior has dramatically changed since the beginning of the 1970s: a few women stop working when they have babies and when they stop, most of them stop for a short period (Pailhé and Solaz, 2006). According to the last census made by the National Institute for Statistical Studies (INSEE), the activity rate of mothers aged 25 to 49 women is 89.8% with one child, 85.3% with two children and 67% with three children. Activity rates of women aged 25 to 49 and particularly of mothers aged from 25 to 49 have had the biggest increase (Maruani, 2000).

It's very difficult to make a causal link between the family policy in France and the increased fertility level. French family policy has a lot of objectives: to help families to face the cost of children; to organize a horizontal redistribution from single persons to families; to organize a vertical redistribution from richest to poorest families. Some allowances are given to all the families without taking account of the family standard of living (like the "family allowances" which concern all the families with two children at least); others are reserved for families under a certain level of income (like the Allocation de rentrée scolaire or the complement familial); and some are targeted only for large families, from the third child. In the last twenty years several policies were implemented and aimed at objectives which were very different: if several measures were introduced to help parents to combine work and family (see above), others constituted a strong incentive to stop working in particular for low-skilled women. It is the case of the reform of the child care allowance (Allocation Parentale d'Education) which came into force in 1994. The allowance which was previously available only for the third child became accessible for the second child. This measure has been a big hit with a lot of mothers but has led a lot of low-skilled women to stop working just after the birth of a second child and it is the reason for the decrease in female activity rates for mothers with two children including one under three from 69% to 54% (Afsa, 1998; Bonnet and Labbé, 1999; Piketty, 2005). More than 10 years later, the labour force participation of mothers of two children having at least one child under 3 has not reached its level attained in 1993 (Figure 3).

The French family policy aims for a lot of objectives and uses a lot of measures (more than 28 were inventoried) that have changed a lot since they have been introduced. This complexity makes evaluation more difficult because it is very complex to clear up the effect of each measure. Existing studies have not demonstrated a causality link between the reform of the APE, for example, and the increase of the fertility rate. Only 12,000 births may be attributed to the change in behavior due to the APE (Piketty, 2005), i.e. 1.6% of yearly births. This is a slight effect, since it is smaller than current fluctuations of fertility from one year to another.

It is clear that French women distinguish themselves from women from others countries because they are less likely to be childless and more likely to give birth to two children. What might matter, in addition to the services, subsidies and allowances, is the attitudes of French people towards the family: according to different surveys, French or international, they give great importance to the family, which is now considered a very meaningful place (Houseaux, 2003; Davoine and Méda, 2008). Finally, it is important to notice that the possibility for mothers to decide to work part-time, with financial incentives, in particular when they work in the public sector, could have an influence.

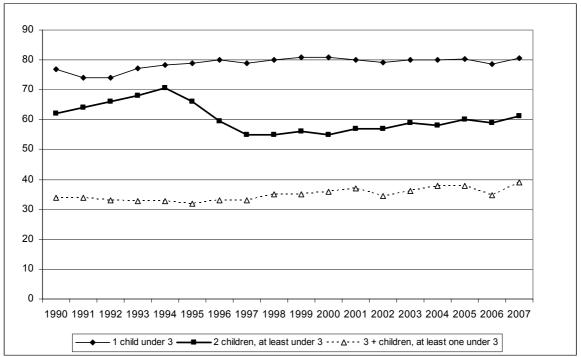


Figure 3: Activity rate of women aged 20-49 living in couple with at least one child under 3, 1990-2007, %

Source: Insee, Enquête emploi.

3. A new family policy centered on reconciliation between work and family

Even if the French government is very proud of its fertility level, the French model is not fully satisfactory. On one hand, it is very expensive; on the other hand, it is not conducive to the gender equality.

In fact, the high public spending on family benefits (more than 3.6% of GDP) is used for different measures which often contradict each other and which are given in the form of cash and not in the form of social services like in Nordic countries: for example, in Denmark, public spending on family benefits account for 4% of GDP, but 2.7% is dedicated to services and only 1.3% to cash, when in France, only 1.5% of GDP is dedicated to services. Among different measures which are family friendly, services (child care) are the most conducive to the female labor force participation: many studies have demonstrated that there is a clear link of causality between the activity rate of women and the development of child care (Jaumotte, 2003). It is obvious that public spending could be better balanced in favor of services and childcare i.e., in favor of improvement of reconciliation between work and family.

In fact, even if female labor force participation is high and if mothers generally

don't stop working when they have a child, the activity rate of French women remains lower than this of Danish, Swedish or Finish women. The employment rate of French women from 15 to 64 is 57.4% when that of women from Denmark or Sweden is higher than 70%. It's clearly the effect of the child: in fact, the employment rate of childless women and childless men is the same, when there is still a difference of 20 points between the employment rate of men and women with children (Chardon and Daguet, 2008). Even if most of the women continue to work when they have a baby, some of them have never worked and others stop after more or less a long time. Pailhé and Solaz (2006) have shown that 39% of working mothers say that their activity has been affected by childbirth (against 6% for the men): half of parity 1 mothers who stop work return to work after 18 months and half of mothers of parity 2 or 3 do so after two years. The reform of the APE has increased this phenomenon. The main explanation for this situation is the bad organization of childcare and the lack of public services for children under 3 years old. In 2005, 57 % of children from 0 to 3 are cared for mainly by their parents on weekdays, almost 19% by child-minders, about 10% in crèches, 5% in primary school, 5% by their grandparents or family and 2% by nannies at home (Table 2).

months to 5 years (2005)	
	%
Parents	57
Agreed childminder	18,5
Crèches	10,6
Ecole maternelle	5,5
Grandparents, family	5,1
Nanies	1,9
Non declared childcare	1,4
Total	100

 Table 2: Main childcare for children from 3 months to 3 years (2005)

Source: Rapport Tabarot (2008)

The women most committed to their working careers make the fewest cutbacks in their work. Where they change their working patterns, it is usually by working part-time or shorter hours rather than leaving the market, as is the practice among the least educated women and those in casual employment (Pailhé and Solaz, 2006). Mothers with low-skilled and bad jobs stop working more often. This interruption is the beginning of a vicious circle. When one asks women why they stop working after childbirth, half of them answer that they would like to continue to work but that it would be too difficult (Méda, Simon and Wierink, 2003). A large proportion of them work atypical hours (work on Saturday or Sunday, very early in the morning or in the evening, during the night, etc.). One third of them say that an improvement in working time or working conditions should have allowed them to continue working.

Three solutions could help to solve this question, to combine reconciliation between high female participation in the labor market, high level of fertility and gender equality: a public service of childhood, i.e. the right of each child to have a place in quality childcare, in a crèche or by a childminder; a profound reorganization of work organization and a bigger investment from fathers in domestic tasks and in care (Méda, 2001).

Méda and Périvier (2007) have calculated that an increase of 0.32% of GDP (5 billion in public spending) in addition to the same amount of money in investment could allow each child aged 0 to 3 years to have a place in childcare and could allow the implementation of new parental leave, shorter, better paid than the actual one, and shared equally between father and mother. Two recent official reports (Tabarot, 2008; Cour des Comptes, 2008) have criticized the current public family policy as too expensive, not conducive enough for gender equality and not having enough incentives for female labor force participation. Despite the recent increase of childcare (improvement of the status of childminders; 11 000 cradles opened between 2005 and 2007), official reports show that only 51 % of children under three years have got a childcare, and the assessed lack is between 300 000 and more than 1 million places (Tabarot 2008; Méda and Périvier, 2007). The official Tabarot's report about the development of childcare has proposed to set a national target of 60 cradles for 100 children under 3 years with a rate of 65% for children between two and three. This measure would be financed by the forecast "overflows" of family tax revenues, which might be between 13 and 16 billions of euros.

In addition, people are in favor of a change: they are more conducive to working mothers, want more available childcare and are more conducive to improvements in the organization of working time for mothers and fathers. In fact, paternity leave, introduced in 2002, which allows fathers to have eleven days paid leave, seems to have changed attitudes: a recent survey shows that French people are more likely to hope that family-friendly organizations of working time are available for fathers as much as for mothers (Bauer, 2008).

Companies are not vet a major actor in the reconciliation between work and family (Lefèvre, Pailhé and Solaz, 2008). Recently, employers have been encouraged to implement their own family-friendly policies, either directly or via works councils. For instance, the 'family tax credit' was introduced on 1 January 2004 with the aim of encouraging companies to implement child care provisions. However, in 2005, a year after the introduction of the 'family tax credit,' only 1% of all establishments that had not yet offered day care places were planning to do so in the future (Lefèvre et al. 2007). Another measure implemented recently to develop employers' participation is related to the creation of the chèque emploi service universel. Companies are encouraged to finance these on behalf of their staff in whole or in part and are, as a result, granted payroll and other tax reductions. According to a recent study of French employers' practices directed towards families, employers' family-friendly policies most often take the form of financial support rather than benefits in kind (Lefèvre et al. 2007). Occasional benefits and services are much more common than those granted on a regular basis. Corporate daycare centers are still very rare, for example, despite the fact that employers attach importance to the provision of child care. Some employers offer a certain degree of flexibility in working hours or agree to informal arrangements, often on a case-by-case basis. These kinds of in kind and in cash benefits offered by companies, and work schedule flexibility are the main determinants of job satisfaction regarding work family balance (Trancart *et al.*, 2009; Pailhé and Solaz, 2009).

The division of household tasks between men and women is huge: in 1998, women living with a partner spent on average twice as much time on domestic and parental tasks as their spouses (Brousse, 1999). This specialization remains when both spouses are working, and is barely attenuated when the woman earns more than the man (Ponthieux and Schreiber, 2006). This is particularly clear for couples with children, especially those not at school (Anxo et al., 2007; Bauer, 2008. This division of labor is quite stable over time, even if the gap decreases, mainly due to the lower participation of women in household work. The development of work balance policies targeted at women as well as men may be a tool for easing parental tasks.

All of these improvements, i.e. development of childcare public services, a profound reorganization of work organizations and a bigger investment from fathers in domestic tasks and care, might promote a new model of "two breadwinners/two careers" (Méda, 2008).

Conclusion

As other European countries, France has experienced almost the same demographic and social changes in family behavior, like delayed entry into adulthood, increased couple instability, more births outside marriage, greater birth control, and increased female participation in the labour force. But French fertility has remained stable; France is now the most fertile country in Europe, with Ireland and the 'replacement level' is nearly reached.

This high fertility is explained by several factors. First the proportion of women without child is low. Compared to most Western European countries, except in Northern European states, France has experienced a very limited increase in childlessness. Moreover, since the 1960ies, the distribution of family size is stable. In other words, French women have more often 2 or 3 children than their neighbours. Finally, the delay of the entry in parenthood has not resulted in lower fertility since there has been an increase of fertility at higher ages.

French women manage to have children and continue to work (or return to work after a short time) after each birth. Four reasons might explain the French singularity: the active family policy; the development of *écoles maternelles;* the measures to promote reconciliation between work and family and the fact that French people give great importance to the family.

The country has pursued an active multi-facetted family policy since the Second World War and was reinforced in the 1980s. The policy enjoys a wide consensus among politicians as well as French residents and in practice helps women (but not men) to reconcile work and family roles. As a consequence, the two- or three-child family is still an ideal in France. The continuing increase in the French TFR since 1995 may not be simply related to one specific policy measure. This long-lasting 'mix of tools' is very likely related to the current high fertility in France, but it is very difficult to quantify its overall effect on fertility. Some measures relating to such matters as education or housing, which were not designed to help families to have children, in fact do have an impact on fertility, as for instance, the écoles maternelles.

We can draw several lessons from the French experience for the Japanese situation. The first lesson is that family policy has to contain a variety of tools targeted at different population. It has to be articulated with other policies, like education, employment and housing policy. The second lesson is that many women make a priority of their professional careers. Policies that take as given that many women want to work while having children and help them to reconcile work and family are a prerequisite to enhance fertility. The third lesson is that cultural norms related to parenthood are a key determinant; policies may act on norms but it takes time to change behaviors.

Notes

ⁱ About 2 years and a half between the first and the second child, about 2 years between the second one and the third, 1.5 year between the third and the fourth and 1 year between the fourth and the fifth.

ⁱⁱ Income tax is not paid by individuals, but by households. The members of the household sum their incomes and the tax rate is computed from the ratio of the total income to the number of tax units (*parts*). For a married couple, each spouse counts for one unit, the first and second children for half a unit, and the subsequent children for one full unit. Unmarried couples cannot merge their incomes and tax units; the children living with the couple must be attributed to one or other of the partners. Lone parents (but not unmarried couples) are allowed to count each child for one full unit.

References

- ADEMA W. and LADAIQUE M. (2005), "Net social expenditure – 2005 Edition. More comprehensive measures of social support", *OECD Social, Employment and Migration Working Papers* 29.
- AFSA C., (1998), « L'allocation parentale d'éducation : entre politique familiale et politique pour l'emploi », *INSEE-Première*, n° 569.
- AHN N. and MIRA P. (2002), « A note on the changing relationship between fertility and female employment rates in developed countries », *Population Economics* n°15.
- ALIAGA C. (2005), Gender gaps in the reconciliation between work and family life, Statistiques en bref, 4/2005, Eurostat.
- ANXO D., FLOOD L., MENCARINI L., PAILHÉ A., SOLAZ A. et TANTURRI M.L. (2007), « Time Allocation between Work and Family over the Life-Cycle: A Comparative Gender Analysis of Italy, France, Sweden and the United States », *IZA Discussion paper serie*, DP No. 3193, http://ftp.iza.org/dp3193.pdf.
- BAC C., LEGENDRE F. and THIBAULT F. (2006), « Une reprise de la natalité française en trompe l'œil ? » *Recherches et Prévisions*, No 85, pp. 83–86.
- BAUER D., (2008), « S'arrêter de travailler durant trois ans pour s'occuper de son enfant : une idée qui progresse chez les pères », *Etudes et résultats, n° 638, mai, DREES*
- BEAUMEL C. and VATAN M. (2008), « La situation démographique en 2006 », *Insee Résultat*, 3/252, 2088
- BECHTEL J., CAUSSAT L., LAIB N., LE MINEZ S. and MIROUSE B. (2005), "Les transferts sociaux en faveur des familles : une évaluation macro-économique", Études et résultats 376.
- BONNET C. and LABBÉ M. (1999), "L'activité professionnelle des femmes après la naissance de leurs deux premiers enfants : l'impact de l'allocation parentale d'éducation", *Études et résultats* 37.
- BRETON D. and PRIOUX F. (2005), "Two Children or Three? Influence of Family Policy and Sociodemographic Factors", *Population*, *English edition*: 415-445.
- BROUSSE C. (1999), « La répartition du travail domestique entre conjoints reste largement spécialisée et inégale », in *France, Portrait Social*, p.268-292.

- BÜTTNER, O., M.-T. LETABLIER, and S. PENNEC. (2002), "L'action publique face aux transformations de la famille en France." *Rapport de recherche du CEE*, 02.
- CHARDON O. and DAGUET F. (2008), « L'activité des femmes est toujours sensible au nombre d'enfants », *Insee première*, N° 1171, janvier
- COUR DES COMPTES, (2008), Rapports sur l'application des lois de financement de la sécurité sociale, Septembre
- DAVOINE L. and MÉDA D. (2008), « Place et sens du travail en Europe : une singularité française ? », Document de travail du CEE, http://www.cee-recherche.fr/fr/doctrav/travail _europe_96_vf.pdf; http://www.cee-recherche .fr/fr/doctrav/work_europe_96_va.pdf
- EKERT-JAFFE O., JOSHI H., LYNCH K., MOUGIN R., RENDALL M. and SHAPIRO D. (2002), "Fertility, timing of births and socio-economic status in France and Britain: social policies and occupational polarisation", *Population* (English edition), 57, 3: 475-507.
- FRANCO, A. (2006), « Les changements démographiques et la nouvelle solidarité entre générations ». *Rapport d'information de l'Assemblée nationale*, déposé par la délégation de l'Assemblée nationale pour l'Union européenne. «http://www.assemblee -nationale.fr/12/europe/rap-info/i2887.asp».
- GEORGES N., MEDA D. et TRANCART D. (2009), « Horaires de travail des couples, satisfaction et conciliation entre vie professionnelle et vie familiale » in Pailhé A., Solaz A. (eds) Entre famille et travail: des arrangements de couple ause pratiques des employeurs, La découverte Paris.
- GODET, M. and É. SULLEROT. (2005), « La famille, une affaire publique ». Rapport du Conseil d'analyse économique, 35. Paris, La documentation française p. 340. «http:// lesrapports.ladocumentationfrancaise.fr/BRP/ 054000761/0000.pdf».
- HERAN F. and PISON G. (2007), "Two children per woman in France in 2006: are immigrants to blame?", *Population and societies*, n° 432, march.
- HOUSEAUX F., (2003), « La famille, pilier des identités », *Insee première*, n° 937, décembre.
- JAUMOTTE, F. (2003), «Female Labour force participation : past trends and main determinants in OECD Countries», Document de travail du Département des affaires économiques, n° 376, OCDE
- LABOURIE-RACAPÉ A., LETABLIER M.T. and VASSEUR A.M. (1977), *L'activité féminine*, PUF

- LEFEVRE C., PAILHÉ A. and SOLAZ A. (2008), Les employeurs, un autre acteur de la politique familiale ? Un état des lieux de leur participation dans la conciliation vie familiale-vie professionnelle in- Conciliation travail-famille : du côté des entreprises, Recherches et prévisions, n° 92.
- LEFÈVRE C., PAILHÉ A., SOLAZ A. (2007), "How do employers help employees reconcile work and family life?", *Population and societies*, n°440.
- MARUANI M. (2000), *Travail et emploi des femmes*, Paris, La Découverte, coll. Repères.
- MEDA D. (2001), *Le temps des femmes. Pour un nouveau partage des rôles*, Paris, Flammarion, rééd. 2008.
- MEDA D., SIMON M.-O. and WIERINK M. (2003), « Pourquoi certaines femmes s'arrêtent de travailler à la naissance d'un enfant? », *DARES Premières Synthèses* n°29.2.
- MÉDA D., PÉRIVIER H. (2007), Le Second âge de l'Emancipation, La société, les femmes, l'emploi, La République des Idées
- MÉDA D. (2008), « Pourquoi et comment mettre en œuvre un modèle «à « deux apporteurs de revenu/deux pourvoyeurs de soins ? », *Revue Française de socio économie*, septembre
- MINISTERE DE LA FAMILLE. (2005), Conférence de la famille 2005: dossier d'information 1 at the front of the Minister's website «http://www.famille.gouv.fr/» during six months (from September 2005 to March 2006), leading to «http://www.famille .gouv.fr/doss_pr/conf_famille2005/dossier_ presse_220905.pdf».
- PAILHÉ A. and SOLAZ A. (2006), « Employment and childbearing: women bear the burden of the work-family balance », *Population and societies*, n°426.
- PONTHIEUX, S. et SCHREIBER A. (2006), « Dans les couples de salariés, la répartition du travail domestique reste inégale », in *Données*

sociales - La société française, p.135-151.

- PIKETTY T. (1998), «L'impact des incitations financières au travail sur les comportements individuels une estimation pour le cas français », *Economie et prévisions* n°132-133.
- PIKETTY T. (2005), « L'impact de l'allocation parentale d'éducation sur l'activité féminine et la fécondité en France », chapter 4 in Lefèvre, Filhon. *Histoires de familles, histoires familiales. Les résultats de l'enquête Famille de 1999*, Les Cahiers de l'INED, n° 156. Paris: INED.
- PLA A. (2008), « Bilan démographique 2007. Des naissances toujours très nombreuses » *Insee Première* n°1170.
- PRIOUX F. (2005), "Recent Demographic Developments in France", *Population-E* 60(4): 371-414.
- REGNIER-LOILIER A. (2006), "Influence of Own Sibship Size on the Number of Children Desired at Various Times of Life. The Case of France", *Population, English Edition*, 61(3): 165-194.
- RICHET-MASTAIN L. (2007), «Bilan démographique 2006 : un excédent naturel record », *Insee Première* n°1118.
- RUAULT M. and DANIEL A. (2003), Les modes d'accueil des enfants de moins de six ans, *DREES Etudes et résultats* n° 235.
- TABAROT, (2008), Rapport sur le développement de l'offre d'accueil de la petite enfance. Mission confiée par le Premier ministre à Michèle Tabarot, Juillet
- TOULEMON L., PAILHÉ A. and ROSSIER C. (2008), "France: High and stable fertility", Childbearing Trends and Policies in Europe, *Demographic Research* Volume 19, article 16, pages 503-556.

Dominique Méda (Centre d'études de l'emploi) Ariane Pailhé (INED)