

Fertility and the State: the efficacy of policy

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Introduction

There are some 30 countries today that have fertility rates that are below an average of 1.5 births per woman. Every one of these countries has reported to the United Nations that they consider this rate to be 'too low' (United Nations 2004). When fertility is moderately below replacement level, the generation size falls only slowly and, if considered necessary, there is an opportunity to supplement the generation size with migration. However, when fertility remains very low, the generation size falls rapidly and massive migration would be required to offset the decline. Hence, we can think of there being a 'safety zone' for low fertility. Population dynamics tends to confirm the view of countries themselves that the 'safety zone' is above 1.5 births per woman.

There is evidence also that very low fertility is generally counter to the preferences of those to whom it applies (van Peer 2000). There are severe questions about the nature of social organization if citizens fall short of having the number of children they would prefer to have when that number is as low as one, two or three children. On the other hand, there is emerging evidence that if very low fertility is sustained for a long period of time, preferences can begin to shift away from childbearing. Goldstein, Lutz and Testa (2003) have shown that as German society has moved away from the support of its children and as German families have responded by having fewer or no children, over 35 years, German society has become less child-friendly and new generations have taken on anti-child preferences not previously evident. Once social organization reaches this stage, reversal of very low fertility becomes much more problematic.

In macro-economic terms, very low fertility leads to serious future labour supply shortages, especially a shortage of young skilled workers at a time when populations are aging rapidly. Already, several countries have reduced the level of retirement benefits and this is creating political problems. McDonald and Kippen (2001) have estimated that, over the next 50 years, Japan's labour supply would fall by 22 million and Italy and Germany's by 11 million if their demography and labour force participation rates of the late 1990s were to continue unchanged. Most of this projected fall in labour supply is among younger workers. The importance of young skilled workers in maintaining international economic competitiveness is underlined by the claim that 80 per cent of new technology is obsolete in 10 years while 80 per cent of workers obtained their qualifications more than 10 years ago (Larsson 2003). At the high technology end of the labour force, older workers cannot substitute for younger workers. In each generation of new technology, it is young workers who assimilate the technology working in complement with older workers who have capital, wisdom and ideas for the application of technology. As science advances, the speed of technological change increases. Countries that ignore this reality are placing themselves at risk and it now seems that every country with very low fertility has become aware of the risk. On the other hand, very low fertility countries have been slow to take corrective action, although some very low fertility countries (the Republic of Korea, Austria, Singapore) have instigated major policy programmes in recent years.

Why have countries been slow to take action?

Policy action on low fertility has been slow for three reasons. First, in the 1970s and 1980s, low fertility tended to be interpreted by demographers as a temporary phenomenon related to the delay of marriage and childbearing (a so-called tempo effect). Because births were merely delayed, fertility would rise at a later point when the delayed births occurred. This view was confirmed to some extent by rises in fertility in several countries (all the Nordic countries, USA, Belgium, Netherlands, Luxembourg) in the latter half of the 1980s. In other countries where fertility had fallen below 1.5 births per woman by the early 1980s (Germany, Austria, Italy), there was a complacency that low fertility would disappear of its own accord as the 'tempo' correction cut in. However, the experience of these countries has been that fertility continued to fall to even lower levels and has remained below 1.5 births per woman for more than 20 years now, almost a demographic generation. They have since been joined by other Southern Europe and by East Asian countries and most Central and Eastern European countries. Waiting for tempo is beginning to look like waiting for Godot. After 20 years of very low fertility, the damage to a country's age structure has already been done because it is cross-sectional fertility that generates the annual number of births. Consistent with this view, Lutz et al. (2003) have argued that policy action needs to be taken to change the timing of births to earlier ages.

The second major reason that countries have been slow to take corrective action is that there has been a widespread belief, a conventional wisdom, among demographers and economists that pronatalist policies are both expensive and ineffective. Historically, this may stem from Glass's evaluation of pronatalist policies in the 1930s (Glass 1940), however, today, the belief is somewhat curious because the weight of evidence (reviewed below) is that pronatalist policies, either explicit or implicit, have been effective. They may be expensive but most social policy is expensive. The question is whether such policies are cost-effective. Furthermore, pronatalist policies are usually justifiable on other grounds such as the improvement of the work-family balance. Nordic countries, for example, conventionally refer to policies that are implicitly pronatalist as family policies.

Third, there have been political obstacles. In some countries, pronatalism was politically sensitive because of its past association with fascism and eugenics (Lutz et al. 2003). More simply, governments have believed that it is not their business to meddle in people's private lives and when this was done in the form that 'women need to fulfil their national duty', there was justifiable reaction from women's organizations.

Migration can provide a partial solution to labour shortages at young ages particularly in the shorter term but in some very low fertility countries there is political opposition to migration on the scale that will be required. Furthermore, because many countries will be facing a simultaneous shortage of young skilled workers, competition for immigrants of this type will heat up dramatically in the future. In the long run, higher fertility rates must be a part of the solution for countries with very low fertility. For those countries with fertility rates that are presently only moderately low (1.7-2.0), it is prudent to implement policies that will sustain fertility rates around their present levels.

The justification for state intervention

The emergence of low fertility as well as high rates of relationship breakdown and singleness is associated with two waves of social change that have had profound effects upon family formation behaviour in the past 40 years.

The first wave of change beginning in the 1960s but consolidated in the 1970s was a rapid expansion of social liberalism (also termed reflexive modernisation). The second wave beginning in the 1980s and consolidated in the 1990s was a sharp shift to economic deregulation including, most importantly for the argument here, labour market deregulation (also termed new capitalism). Both these waves have enhanced individual aspirations in relation to the quality of personal and economic lives. However, in differing cultural and welfare environments, both have also brought considerable pressure to bear upon the capacity to form and maintain families. Yet the personal desire for intimacy and individuation through family relationships remains strong. Survey evidence reveals that, in most countries, most young people aspire to an enduring intimate relationship and to having children. However, faced with the realities of the new social and economic world, many do not achieve these aspirations. In their support or promotion of social liberalism and economic deregulation often through legislation, states have been principal players in the higher risks now associated with family life. Accordingly, states must be principal players in restoring the social balance.

In policy terms, the solution lies neither in the conservative right's call for a rolling back of social liberalism nor in the left's agenda of rolling back economic deregulation. Both these waves of change have achieved many of the desirable outcomes for which they were intended. Most people prefer to live in a society that offers social freedoms and personal choices. Most people prefer to work in an environment that rewards enterprise and hard work. But most people also prefer to have long lasting intimate relationships and to have children. The solution, therefore, lies in a third wave of social change, a compensatory wave in which the state and other institutions of society provide a new and substantial priority to the support of family life, most especially, the bearing and rearing of children. New perspectives of the family are required that simultaneously recognise the vital social and personal significance of family life but also that family life will be played out amid the social liberalism and the new capitalism that will be integral to 21st century economies and societies.

The causes of low fertility: social liberalism or reflexive modernisation

The first major wave of social change in the past three decades was the values shift and associated institutional and legislative changes that van de Kaa and Lesthaeghe (van de Kaa 1987), following Inglehart's (1977) work on the shift from materialism to post-materialism, described as the second demographic transition¹. Emergent from the rigid social regime of the male breadwinner model of the family that held sway in the 1950s and 1960s and for decades before this period, this wave of change is referred to as reflexive modernisation by some sociologists (Beck, Giddens and Lash 1994). Reflexive modernisation is modernisation of the *principles* of industrial society involving assessment by individuals or groups of the appropriateness of existing social institutions for modern life. It has brought a sharply increased capacity for

¹ It is preferable to label social phenomena according to their intrinsic form rather than according to their demographic outcomes.

individuals to pursue personal autonomy and to construct their own identities rather than having those identities defined for them by societal norms and institutions. Under reflexive modernisation, individuals are freed from institutional and normative constraints but, at the same time, they become more responsible for the outcomes of their actions. In this latter sense, the risk to individuals is increased and society, in Beck's (1992) terms, becomes risk society and individuals become risk-sensitive and most become risk-averse. For example, at the personal level, women aware of the high risk of divorce, will be more cautious in the selection of a husband and more likely to seek qualifications and a work reputation that would enable them to be economically independent should the need arise.

In regard to family formation, reflexive modernisation lifted the lid on divorce, previously artificially held down by legislation and social opprobrium. Many countries enacted 'no-fault' divorce laws, unilateral divorce based upon the irretrievable breakdown of the marriage proven by a relatively short separation. Also in the 1970s, the pattern of early marriage and early childbearing that characterised the 1950s and 1960s gave way rapidly to cohabitation outside marriage and delayed childbearing. Various institutionalised rights were extended to cohabiting couples and to children born outside of marriage. Couples who chose to live together rather than to marry immediately were seeking to maintain their personal autonomy while testing the relationship for the stronger and more altruistic commitments involved in marriage. The rise of the cohabiting relationship can therefore be seen as a product of the risk aversion that came with reflexive modernisation. Cohabitation prior to marriage became an experiment in a form of intimacy that allowed the greater pursuit of personal autonomy (McDonald 1988). In this sense, cohabitation can be regarded as a pathway that promotes the institution of marriage in a riskier social environment (McDonald 2003).

Reflexive modernisation was characterised most importantly by at least partial fulfilment of the claims by women for a greater level of gender equity in the distribution of returns from modernisation particularly through engagement in paid employment. Structures that discriminated against women in the workplace were gradually dismantled. The ensuing changes in women's lives were facilitated by the revolution in contraceptive technology and legal judgements or legislative changes that enabled freer access to abortion. Control over their own fertility enabled women to plan and organise their lives with greater certainty. Young women were encouraged to enhance their employability through increased levels of education and their education levels have risen sharply, now being higher in most countries than those of young men. Labour force participation rates and wage rates of women relative to those of men also rose sharply (OECD 2002; Macunovich 1996). Nevertheless, some social institutions are still characterised by considerable gender inequity. These include the family itself, the tax-transfer system and working arrangements and conditions (McDonald 2000a, 2000b). While there are increased personal risks for men and women from social liberalism, the risks are greater for women. There is a gender inequity in how the risks are borne.

Reflexive modernisation has been extolled as providing the opportunity for 'pure relationships' that are held together not by social constraint but by freely-given intimacy (Giddens 1992) and derided as the selfish pursuit of one's own fulfilment at the expense of others and, more broadly, at the expense of the institution of the family

(Popenoe 1987). An intervening position sees reflexive modernisation in a Kantian sense of autonomy that enhances the individual's capacity for self-direction. This capacity can be put to good or bad purpose. This is the social, as distinct from individual, risk associated with the provision of personal autonomy. The dilemma faced today is the same as that faced by the Enlightenment philosophers: 'the reconciliation of the goal of personal autonomy with the conviction that men and women are irreducibly social' (McDonald 1988: 44).

The causes of low fertility: economic deregulation or the new capitalism

In the 1980s and into the 1990s, the world was swept by what has become known as new capitalism. In keeping with the neoliberal philosophy that the free operation of the market is the most efficient and effective form of economic organization, in the past 20 years, regulations and restrictions have been reduced so that capital can flow easily in the direction that maximises business efficiency and profit. The theory is that profitable businesses mean improvements in employment and wages and, hence, in economic wellbeing. The characteristics of this new economic regime are free flow of capital across international boundaries, free trade, freedom for employers and workers to determine wages and working conditions, and curtailment of government-funded social welfare.

The principles of old capitalism were brought under scrutiny and found to be rigid and 'traditional'. Progress involved dismantling market rigidities by providing greater autonomy to firms, investors and workers to pursue the most profitable outcomes. As the structures of old capitalism (stability of industry and company structures, lifelong employment, routine jobs, unions, tariffs, currency controls, investment restrictions, relatively high taxation and state welfare provision) were designed to provide protections for both firms and employees, the new capitalism meant, as Beck (1992: 19) has said, that the social production of wealth became systematically accompanied by the social production of risk.

In relation to family formation and dissolution, the most important dimension of the new capitalism is its impacts on the labour market. These impacts include: industry restructuring with a rapid increase in the producer services industries and decline in manufacturing industry; direct negotiation between workers and employers and the decline of large unions; a shift in labour demand to higher levels of human capital; flexibility of employment meaning easy movement within the system, flexibility of appointment, dismissal, work content, working conditions and working hours but absolute dedication to the completion of short-term tasks; downsizing as a short-term, cost reduction strategy; the end of 'jobs for life' and; contracting out to increasingly specialised firms. The new capitalism offers great rewards to those who are successful in its terms but is unforgiving to those whom it rejects. Accordingly, rising income inequality has been a significant feature of new capitalism.

Richard Sennett (1998, Chapter 8) has argued that the personal consequences of work in the new capitalism have led to a 'corrosion of character' including loss of a life-time identity, loss of trust in others, loss of a sense of the value of service (altruism), decline of community (see also, Putnam 2000), vilification of the 'dependent', and fear of failure or being left behind. Overall, like Beck, Sennett describes new capitalism as leading to a greatly increased sense of risk. This sense of risk has been heightened by witness: witness of friends or colleagues losing their jobs even in the

middle or high level ranks; witness of long-term unemployment; witness of vilification of the unemployed; witness of the effects of recessions; and witness of the collapse of major corporations through corruption, bad management or bad timing. On the other hand, in distributional terms, new capitalism rewards innovation and hard work and, hence, provides incentives for both. Jobs are less routine and can be interesting and challenging. The individual worker has greater freedom to sell his or her skills to the highest bidder, and with computer technology, is very much more productive. Thus, people also have witness of the labour-related successes of the new capitalism. Being engaged in a game of chance can bring reward or failure. The difference under reflexive modernisation and new capitalism is that the individual bears the responsibility and the consequences rather than the society as a whole.

Both Beck and Sennett stress the negative outcomes of these social trends for individuals and for 'community'. They say little about outcomes for the family, although, implicit in their arguments is the sense that the family, as the fount of altruism, is placed under great strain. Unlike the old capitalism where, prior to the 1970s, the worker's wage was determined on the basis of the assumed support of a wife and children, under new capitalism, employers have no interest in the family status of their workers and, accordingly, feel little or no responsibility for workers' family lives.

Like reflexive modernisation, new capitalism has been facilitated by governments through changes of laws relating to industrial relations, trade, financial institutions, taxation and rights to welfare.

Resilience, adjustment and adaptation; the conflict of autonomy and intimacy.

Despite increased pressures, in broad terms, the family has remained central to most people's lives even in the most socially liberal countries. Survey after survey shows that a large majority of young people in most developed countries, including the socially liberal countries, continue to say that they would prefer to have a long-lasting intimate relationship (marriage, in most of these countries) and that they would prefer to have at least two children (van Peer 2000). Caring support for aged people continues to be provided overwhelmingly by family members (McDonald 1997). Family remains central to the lives of most people and the quality of family relationships has a very strong association with the quality of life as a whole (Nolan 2002).

Values related to the family are not simply swept aside by the tides of reflexive modernisation and the new capitalism. They represent a third dominant dimension of social values. Family values are resilient because humans are inherently social and have a strong need for intimacy. Isolation and loneliness are not desirable characteristics, and, for most people, these are avoided principally through the intimacy of family relationships. A recent report relating to Austria and Central European countries is indicative:

What is really important to Austrians and CEE citizens, especially EU candidate countries? On assignment by Generali Insurance Group, Market Research Institute Fessler-GfK in Vienna investigated and compared the needs and values of persons within the individual countries. Conclusion: Austria and the Central European countries are dominated by the values of

family/relationship, liberty/independence, and financial security (Puzzlewise 2/2003, http://www.oif.ac.at/puzzle/puzzlewise_02_2003_en.html, accessed 4 February 2003).

Liberty and independence are the aims of reflexive modernisation. Greater financial security is a goal of new capitalism, although it often misses the mark. Family values are the third leg of the values tripod but they have not been supported by governments to the same extent as the other two values. Without this support, reflexive modernisation and the new capitalism have placed the institution of the family under great strain. Under new capitalism, individuals must maximise their utility to the market. This means that they need to focus upon the personal acquisition of saleable skills, work experience and a marketable reputation. Reflexive modernisation provides individuals with the freedom to pursue individual agendas. In contradistinction, family involves altruism, that is, time and money freely devoted to others. While new capitalism and reflexive modernisation may generate people who are both risk-accepting and risk-averse, it is easier to be risk accepting when others (including potential future others, that is, children) are not affected by the outcome. The widespread desire for intimacy and family relationships, therefore, tends to make the majority of people risk-averse. As the effect of children upon women is greater than upon men, women are likely to be more risk averse than men (McDonald 2002).

Social liberalism, economic restructuring and the emergence of very low fertility

Social liberalism and economic restructuring have given rise to two important changes for individuals: the provision of gender equity through an opening up of opportunities for women beyond the household and the rise of risk aversion among young people of both sexes in an increasingly competitive labour market. These changes influence fertility in the following ways.

Gender equity

Most advanced societies today have a recent history of differentiated family roles for men and women where men specialized in wage earning while women specialized in homemaking and caring for relatives, especially children. Rigidly differentiated roles for men and women were questioned as part of the 1960s-1970s reaction to socially prescribed roles for men and women and towards greater freedoms for the individual. As a result, education levels for women increased dramatically and opportunities in paid employment were opened to women to the extent that, in the institutions of education and market employment, considerable gender equity was afforded to women as individuals. However, the movement to gender equity has been focused upon individual-oriented social institutions (education, employment) and, consequently, family-related institutions, especially the family itself, have continued to be characterized by gender inequity. By the time that women begin to consider family formation, their experience has been of considerable freedom and gender equality through education and wage employment. However, they are very aware that their freedoms and equality will be distinctly compromised once they have a baby. This is especially the case in labor markets where little or no provision is made for the combination of work and family. There is a considerable economic dimension to the gender argument, the mechanism being the lifetime earnings lost to women through having children.

In these circumstances, women, exercise careful control over their own fertility, delay their family formation and have fewer children to an extent that fertility falls to very low levels. The central problem is that family formation involves greater risks for women than it does for men and that women will be wary about embarking upon marriage and childbearing if they do not feel confident about their future opportunity to combine family with the other opportunities that have opened up for women, especially work.

Labor market risk aversion

Globalization and sharply rising education levels have given rise to high economic aspirations among young people. At the same time, labor market deregulation has led to a wider variation in their economic outcomes in terms of earnings and career stability and progression. Engagement in the deregulated labor market is now seen as involving greatly increased risk. Jobs for life and progression through seniority have gone. There are chances that the rewards will be very great while at the same time there are risks of failure particularly through job loss or slow progression relative to peers. Under these conditions, young people, on average, become risk-averse, that is, they follow pathways that have lower risk. Living in a society that has experienced recent high unemployment among young people adds greatly to this sense of risk. Personal experience of unemployment and its duration not only contribute to low savings but also to loss of place in the competitive labor market greatly exacerbating the sense of insecurity. While, at an individual level, early labor market success promotes earlier family formation, the societal balance is towards later achievement of a secure economic situation.

Investment in one's own human capital (education and labor market experience) is seen as the essential hedge against these risks, the optimal risk aversion path. This involves a considerable commitment to self and to the employer especially in terms of long work hours in opposition to a commitment to more altruistic endeavors such as service to family members and family formation. As a consequence, family formation is put on hold while human capital is accumulated. Where a couple has formed a relationship, each will be concerned about the earning capacity of the other adding to the sense of risk aversion. Women not in a relationship, aware that their own income is likely to be reduced during the early years of life of their children, will look to partner with a man who has a secure income.

Providing the confidence to form families

The above discussion indicates that delay of family formation is not so much based upon experienced economic outcomes but, like any other investment, on the degree of confidence that people have, in this case the degree of confidence that potential parents have about their capacity to undertake family formation while not placing themselves at economic risk or at risk of falling well short of their aspirations as individuals. The solution to low fertility therefore lies in providing a greater sense of security to young women and young men that if they marry and have children, they will be supported by the society in this socially and individually important decision. If instead they look ahead to societal arrangements that severely disadvantage those who have children, they will delay their family formation until they feel they have reached a secure enough position to take on the costs of family formation. Individual delay means very low fertility for the society. Having been instrumental in the rise of the conditions leading to low fertility, it is incumbent upon governments to take the lead in providing this greater sense of security. However, there is a role for other

institutions as well, especially the institutions of employment. There is also scope for increased awareness of the countervailing risk of delay, that is, the risk that you will not be able to have the child that you want to have. There are many other risks and fears associated with having children and the more that a society is able to address these risks, the higher will be its fertility rate.

Empirical studies in support of the theory

Baizán et al (2002) provide a comprehensive study of the lives of young people in Spain very much in the framework that I have postulated. They find that years in education have increased dramatically. From the 1950-54 birth cohort to the 1960-64 birth cohort, years in education increased from a mean of 15.4 years to 25.6 years for men and from 10.6 years to 25.4 years for women. Again between these two cohorts, the number of episodes of unemployment and the number of job changes also increased significantly. They also record an increase in the heterogeneity of experience from the older to the younger cohort, especially in employment. Finally, they observe that women's careers are becoming more similar to those of men. They conclude that all of these trends in combination with the Spanish family system and the costs of housing have led to the postponement of family and household formation. Young people, both men and women, wish to be well established in their employment before they marry and have children. Also in relation to Spain, Ahn and Mira (1998) observed that the lack of stable jobs among men is one important factor that has forced many young people to delay marriage and childbearing. Between 1987 and 1995, the proportion of employed Spanish men aged 25-39 years who held permanent work contracts fell from 55 per cent to 37 per cent. Ahn and Mira (1998: 15) concluded that the key to increased family formation in Spain lies in 'increasing the level of confidence among young workers about their future employment prospects'.

A norm of achieving a good income situation before having children has also emerged in Sweden (Andersson 2002). Indeed, Andersson makes the interesting suggestion that where a parental leave payment is earnings-related, there is an incentive to delay the birth of the first child until a couple reaches a higher income level. de Wit and Ravanera (1998) also argue that young Canadians are inclined to wait until they are secure in work before having children but they make the additional observation that, where young people have been successful in attaining a good income and employment situation at a relatively early age, this speeds up entry to marriage and reproduction. This underlines the hypothesis of increasing heterogeneity among young people. For the Netherlands, Liefbroer (1998) using attitudinal data from a panel survey, found that the timing of the first birth is influenced by the perceived costs of having a child for one's career opportunities but that children were also seen as reducing life's uncertainties because of the stabilizing effect that they had on life (this in keeping with the hypothesis of Friedman, Hechter and Kanazawa 1994).

These findings sit within an interesting theoretical debate. Happel, Hill and Low (1984) presented a theoretical argument and empirical evidence using data for the United States to argue that there is a greater economic incentive for couples to postpone childbirth where women acquire high-paying jobs because of the potential loss of earnings and job skill depreciation that would ensue from time out of the labor force. Counter to this, using better measures, Kravdal (1994) found that accumulated economic and material resources have a large effect upon the timing of the first birth, whereas economic potential has little influence. Cigno and Ermisch (1989) had made

the same argument for the United Kingdom but the available data were inadequate for the purpose. The reconciliation between the two arguments, as intimated originally by Happel, Hill and Low, may be the capacity to purchase childcare and other child-related needs that comes with the accumulation of wealth and the acquisition of a high income-earning husband.

Beets and Dourleijn (2001) have documented the increase in durations and levels of education in the Netherlands and its impact on the timing of first births. Britta Hoem (2000), in explaining the fall in fertility in Sweden in the 1990s, described a remarkable shift towards education among young women in Sweden as the Swedish economy came under increased pressure. In 1989, 14 per cent of Swedish women aged 21-24 years received an educational allowance that is payable to all adult students (ages 20-50 years); in 1996, the figure was 41 per cent. At ages 25-28, the equivalent change was from 9 per cent to 22 per cent. Using municipal data, she also observed that delays of childbearing were positively correlated with regional levels of unemployment. Similar observations for Sweden have been made by Andersson and Liu (2001).

These findings suggest that, as education levels continue to rise in response to the demands of the liberalised labour market, first births will be delayed even longer. With very lengthy delays, the chance that the first birth does not occur at all increases. This becomes more the case where young people have a poor understanding of the decline in fecundity (the biological capacity to reproduce) as women age through their thirties. Beets and Dourleijn (2001) have documented the relatively poor knowledge of young people about this issue in the Netherlands and suggest that information on declining fecundity should be included in school curricula along with family planning information, that is, they consider that young people may need conception education as well as contraception education. If this is the case in the Netherlands where information and education on sexuality is highly advanced, how much more likely is it to apply in other countries?

While levels of childlessness in advanced countries may be more divergent in the future, the evidence until now suggests that the main factor in fertility difference between countries with moderately low fertility and countries with very low fertility is the extent to which childbearing continues beyond the first birth after the first birth occurs at a late age (Lesthaeghe 2001). Recent studies in Europe have focused upon the determinants and speed of progression from the first to the second birth and from the second to the third birth. The evidence suggests that a higher education level does not lead to lower progression rates at these birth orders. Indeed, it is not unusual to find the opposite effect. For example, Kreyenfeld (2002) found a positive correlation between a woman's education level and the transition rate to the second child for West German women. Kravdal (2001) argues that we should pay attention to the combined effects of all of the parity progression rates because of selectivity at lower progressions. He argues that educated women in Norway have a higher level of childlessness and a later age at first birth that contribute to lower fertility rates overall despite only small differences in progression rates by education at higher orders of birth. The later age at first birth of educated women means that it is somewhat artificial to examine rates of parity progression at higher ages while controlling for current age.

Giraldo et al (2004), in a comparison of France and Italy, concluded that the higher fertility in France was associated with institutional factors in France that made it easier for French women to combine employment and having children. Similarly, Del Boca (2002) observed for Italy that the availability of child care and part-time work increase both the probability of working and having a child.

Policies which would provide more flexible working hours choices and greater child care availability would aid in reducing the financial burden of children (Del Boca 2002. 3)

The cultural divide

If all advanced countries have been facing similar forces of change, why is it that some have very low fertility rates and some have only moderately low rates? There is evidence that fertility rates in advanced countries today are broadly correlated with the extent to which governments and employers provide supports to families with children. Table 1 divides advanced countries into two groups: those with fertility rates above and below 1.5 births per woman. There is a cultural divide between these countries. Those above the 1.5 level (Group 1) include all the Nordic countries, all the English-speaking countries and all the French and Dutch speaking Western European countries. Those below the 1.5 level (Group 2) include all the advanced East Asian countries, all the Southern European countries and all the German-speaking Western European countries. In broad terms, the Group 2 countries are countries in which there is a strong, traditional value that family and state are separate entities and that families should support their own members without intervention from the state. Accordingly, states in these regions have been slow to implement family assistance measures. With some exceptions, the opposite is the case in the Group 1 countries; in general, they are notable for the family-friendly institutional arrangements that they have implemented in the past 20 years and for relatively higher levels of gender equity within the family. The onus of family caring and non-income maintenance in Group 2 countries falls almost exclusively upon women, that is, the male breadwinner model of the family remains largely intact. Because women are expected to provide caring and maintenance work, the service and public sectors in Group 2 countries are generally smaller than they are in Group 1 countries (Bettio and Villa 1998). In Group 1 countries, these are the sectors that are more likely to employ women and to have family-friendly work environments. It is no surprise then that both fertility and labor force participation rates for women are lower in Group 2 countries than in Group 1 countries.

Ironically, Group 2 countries see themselves as having strong traditional 'family values'. This image of themselves makes change from the traditional family organization politically more difficult. Furthermore, the cultural divide between countries in Groups 1 and 2 has very long historical origins suggesting also that change is likely to be difficult. Therborn (1993) established that there is a strong relationship between the development of children's rights in Western nations and the forms of legal patriarchy that applied at the beginning of the 20th century and which still persist to varying degrees. Therborn's classification of countries in terms of the timing of movement towards children's rights and away from patriarchy bears a close resemblance to groups based upon current fertility levels. He did not discuss East Asia in his classification but, in regard to children's rights, this region lagged even further behind.

The cultural divide indicates that differences between countries with very low fertility and those with moderately low fertility are due to institutional factors rather than to individual-level explanations. Hence, the state, as the custodian of the nation's institutions, is the logical instrument for change.

Table 1: Total Fertility Rates 2003: Two Groups

Group 1 Countries	TFR	Group 2 Countries	TFR
United States (2002)	2.01	Portugal	1.44
Iceland	1.99	Switzerland	1.41
Ireland	1.98	Malta	1.41
New Zealand	1.96	Austria	1.39
France	1.89	Germany	1.34
Norway	1.80	Spain	1.29
Denmark	1.76	Italy	1.29
Finland	1.76	Japan	1.29
Australia	1.75	Greece	1.27
Netherlands	1.75	Singapore	1.26
Sweden	1.71	Republic of Korea	1.19
United Kingdom	1.71	Hong Kong SAR	0.94
Luxembourg	1.63		
Belgium	1.61		
Canada (2002)	1.50		

The impact of policy on fertility

Fertility rates have fallen in almost all developing countries over the past 40 years. It is now accepted that, in most cases, government policy played a major role in the achievement of this remarkable phenomenon (REF). However, acceptance of this fact has been belated. In the early years of family planning programs, there was great scepticism on the part of many demographers about whether governments could influence fertility rates in the context of strong traditional supports to high fertility. Later, the 1970s was the decade of 'development is the best contraceptive', that is, governments could not achieve success with family planning programs unless substantial economic development had taken place in advance. The demographic profession seems to be inherently conservative requiring absolute empirical proof before accepting facts that have already become evident to others through their first-hand experience on the ground.

It is not surprising, then, that many of the same profession tend now to question the efficacy of policy programs that are aimed at increasing or sustaining fertility rates. The reasons offered are similar to those that were used to reject policy efficacy in relation to fertility decline: the culture of values is too difficult to reverse or indubitable empirical evidence is not available. Government family planning programs in developing countries went ahead on the basis that action could not be delayed and, although the evidence may not have been perfect, there was sufficient evidence to invest scarce development funds in family planning. The gamble, if it was a gamble, was successful and we are now facing a world population in 2050 of around nine billion compared to the 16 billion that was projected in the mid 1960s. In

hindsight, we can conclude that countries made the correct decision to proceed vigorously with the implementation of family planning programs at a time when the evidence for their efficacy was incomplete. In fact, this is not an unusual circumstance in the implementation of social policy. Social policy is often implemented on the basis of hypotheses that remain to be confirmed. Indeed, implementation is often the only way to test whether a policy is effective or not and, even then, it may be many years before conclusive evidence is available.

The reluctance of demographers to recommend action to sustain fertility at moderately low levels or to increase fertility from very low levels is curious because, in general, the existing evidence for the efficacy of such policies tends to be favourable. Several demographers examined the effectiveness of pronatalist policies introduced in Hungary in 1965. The 'strong' conclusion was that these policies stopped the fall in fertility in Hungary that was underway at that time (Andorka and Vukovich 1985). Buttner and Lutz (1990) concluded that an explicitly pronatalist policy package introduced by the German Democratic Republic in 1976 increased fertility in the GDR in the years from 1977 to 1987 by between 15 and 20 per cent.

In 1997, after an intensive cross-country analysis, Gauthier and Hatzius (1997) concluded:

On the basis of an econometric model applied to data from 22 industrialized countries and spanning the period 1970-1990, the results suggest that cash benefits in the form of family allowances are positively related to fertility (p304).

They also suggest an 'additional effect of what we have referred to as the more general package of cash and in-kind benefits for families' (p304). Despite this positive conclusion, this study is often cited as evidence that policy is ineffective. The reason is that the study concluded that the effects of policy appear to be small. Gauthier and Hatzius quantify the impact of increases in family payments as being 0.07 of a child for a 25 per cent increase in expenditure. The additional effect of the broader package is not quantified but it seems that a comprehensive policy based on a 25 per cent increase in expenditure by government could produce a fertility increase of 0.1 of child. Presumably a 100 per cent increase would produce an impact around 0.4 of a child. For most very low fertility countries, a 0.4 increase in the Total Fertility Rate would shift fertility into the safety zone. It is important to stress that only small policy impacts are required. To produce another baby boom or even replacement level fertility is not the aim. Gauthier's more recent review of the effect of family policies on fertility (Gauthier 2004) makes the point that it will always be difficult to disentangle the impact of any policy change upon fertility when there is no counterfactual: what would have happened without the policy change? There are also difficulties in getting adequate data on policy changes across countries and, even more problematic is the difficulty of converting policies stated in words into quantitative measures that are comparable across countries. Nevertheless this study repeats that there appears to be a positive impact of cash benefits on fertility and that 'the literature also suggests that policies that support working parents can have an effect on fertility' (Gauthier 2004: 15), although the picture is mixed.

A further methodological issue, as Castles(2003) has pointed out, is that there is a problem of causal ordering when we attempt to estimate the impact of pronatalist policies on fertility. He argues that pronatalist policies are likely to be implemented by governments when fertility rates are low. Accordingly, in the early years of implementation of a policy, a substantial policy initiative may be associated with low fertility. If the timing of implementation of the policy is not taken into account, then we may associate low fertility with policy that, in the longer term, will be effective. The Gauthier and Hatzius study was based on policy in the period 1970 to 1990. This may well be 'early days' in Castles' terms. Interestingly, a more recent multi-country econometric study based on data from the 1990s (Adkins, 2003, discussed below) shows much stronger effects of financial payments on fertility than were observed in the Gauthier and Hatzius study.

In recent years, the number of studies of the effectiveness of policy has increased. If anything, as policies have been more widely and more comprehensively applied, the evidence of a positive effect has become stronger as would be expected from the causal ordering argument. Castles (1993) found that the package of family-friendly policies effectively explained the positive association between fertility and women's labour force participation rates in 21 OECD countries. Castles observed an 'extremely strong positive relationship between fertility and formal child-care provision' and a lesser correlation with family-friendly workplace policies (flexible working hours) (Castles 2003: 222). A comprehensive study by the Rand Corporation (Grant et al. 2004) concluded that 'government policies *can* have an impact on fertility'. This report suggests that the removal of policies supportive of families in Poland, East Germany and Spain contributed to falls in fertility in those countries. In relation to France, the report states: 'Family policy has been high on the political agenda ever since (the introduction of the Family Code in 1939), resulting in relatively high fertility rates' (Grant et al. 2004, xv).

A major review of existing studies of the effectiveness of policy, Sleebos (2003), concluded:

Most studies seem to suggest a weak positive relation between reproductive behaviour and a variety of cash benefits and tax policies. Impacts of family-friendly policies are more contradictory with some studies suggesting strong positive effects on fertility from higher child care availability. But weaker or mixed effects from maternity and parental leave. ... What is required is coherent application of a range of well-designed interventions, applied consistently over time (Sleebos 2003: 5).

In agreement with the theoretical discussion in this paper and the Group 1/Group 2 dichotomy, Neyer (2002) concludes on the basis of a cross-national study of policy that:

Countries which regard their family policies as part of labor market policies, of care policies, and of gender policies seem to have fared better in retaining fertility above lowest low levels (Neyer 2003, 32)

Adkins (2003), using a multi-level analysis across 18 European countries, also found that national level, institutional (policy) differences helped to explain fertility

differences. He observed 'a very substantial, significant positive effect (on fertility) of the national mean child benefit level after controlling for other confounding factors' (Adkins 2003: 27). Specifically, he measured a 25 per cent increase in women's fertility for every 10 per cent increase in the child benefit level as a proportion of total income. However, he also found that payments that are contingent on the mother remaining out of the labor force are a poor approach because these operate as work disincentives for women when they wish to return to work after having a child.

There are other studies that have shown that direct financial incentives can be effective (Lutz 1999; Milligan 2002). Direct financial subsidies assist with the direct costs of children whereas policies that enable women to combine work with family reduce opportunity costs (Ermisch 1989). Opportunity costs rise with a woman's wage whereas direct costs of children are less responsive to rising incomes (except in so far as wealthier parents have higher discretionary expenditure on children). This means that as the wage rate rises, women will be more likely to favour the combination of work and childcare than that of staying at home and receiving a direct cost subsidy for children. The conclusion from this discussion is that the full range of incentives and supports is required (financial, services, workplace arrangements) because they are relevant in differing degrees to women according to their potential wage and also according to their work preferences. They also need to be provided in as universal a system as possible so that parents are not faced with disincentives if benefits are withdrawn as they change their labor force participation or income level.

A number of studies in Norway have indicated the importance of access to childcare to fertility. Kravdal (1996) found that a 20 percentage point increase in childcare enrolment would increase cohort fertility by 0.05 of a child. Using data from the Norwegian Registration System and the Norwegian Municipality Data Base, Rindfuss et al. (2004) found that women living in municipalities that have the highest availability of child care places make the transition to becoming a mother at younger ages.

There seems to be strong agreement among researchers that the transitions rates from first to second birth and from second to third birth are highly related to access to resources that enable women to combine work and family. Baizan et al. (2002: 202) argue in respect of Spain that there is a high opportunity cost associated with childbearing because of the lack of 'social care services'. Ronsen (2001) concludes that the improvement of policies to support work and family in Norway has led to a reduction in fertility differences between women of different education levels. Hoem, Prskawetz and Neyer (2001) find higher rates of transition from the second to the third birth in Sweden than in Austria but find little difference in the educational levels of women in the two countries nor in the levels of individual autonomy of women. In keeping with gender equity theory (Joshi 1998; McDonald 2000a), they conclude that the difference between the two countries is brought about by public policy in relation to work and family. The opportunity cost of the third child was greater in Austria because of lack of access to resources that support the ability of women to combine work with a third child. These resources include availability of part-time work, access to affordable childcare, access to long-duration parental leave and the level of maternity leave payments. Olah (2001) draws similar conclusions on the basis of a careful study of transition from the first to the second birth, this time comparing Sweden with Hungary. Rindfuss et al. (1996: 288) argue that fertility in the United States has remained relatively high because childcare centers have become more

available and acceptable. They say that 'the preference, the need, and the ability to pay for center-based childcare is greatest among female college graduates'. This has meant that the depressing effects that increasing education of women might have had upon higher-order fertility have been mitigated. Tsuya (2000) attributes low fertility rates in Japan and South Korea to lack of support for working women both outside and inside the household.

As was the case with the decline in fertility in developing countries, examples of failure of policy can be alleged. Pronatalism was considered to be ineffective because the fertility rate in the most pronatalist country in the world, France, remained lower than in many other advanced countries in the first two decades after the introduction of the 1939 Family Code. Now with the highest fertility in Europe and having achieved a smooth transition to moderately low fertility, no one today refers to France as a failure of pronatalism. Indeed, the opposite is the case - it is used as one of the paramount examples of the effectiveness of state involvement. For example, Grant et al. (2004) conclude that France's success in maintaining its fertility rate is attributable 'to its ability to create an environment which encourages childbearing. This environment is created by a combination of policies that jointly serve this aim' (Grant et al. 2004: xv). Japan and Singapore are cited as other examples of the failure of policy. In both countries, fertility has continued to fall despite government attempts to reverse the trend. In my assessment, policy has failed in Japan and Singapore because it has attempted to target particular types of women (an individual approach) rather than to reform societal institutions on a broad scale. In both countries, single women were targeted especially higher educated single women and, at least in Singapore, financial incentives have been directed heavily to high-income women. In both countries, government has largely failed to confront employers in order to achieve workplaces that are more cognisant of the needs of parents especially mothers. Expected work hours remain in sharp conflict with family responsibilities. Women aged less than 30 in Singapore, for example, work an average of 52 hours per week.

Conclusion

While there may be arguable exceptions, in general, the evidence is strong that the family policies of the Group 1 countries have been successful in maintaining their fertility rates at a moderate level. The more significant question, however, is whether fertility can be increased by policy in the Group 2 countries where, as I have argued, the introduction of pronatalist policies is more difficult. There is a growing acceptance in these countries that policy action must be taken and, in this article, I have described why state intervention is justified on moral, economic and sociological grounds. At least four of these countries have instituted major policy programmes to reverse the trend, namely Austria, the Republic of Korea, Singapore and Japan. The Korean reforms were introduced only in 2004 and so it is too early to assess the efficacy of these policies but Austria's fertility rate rose from 1.36 in 2002 to 1.44 in 2004 following the reform of policy in 2002. While small, this movement is at least in the right direction. My own view is that Group 2 countries will eventually succeed in raising their fertility rates through public policy firstly because they will have to do so and secondly because their cultural institutions are already shifting towards greater intervention in the affairs of family. Sharp increases in divorce rates are an indication of this. The question is not so much about whether fertility will increase in Group 2 countries but about how quickly this will happen. The demographic and economic legacy of decades of very low fertility will last well beyond those decades.

Fundamental to policy is institutional change that reestablishes a sense of confidence among young people that they will be able to embark on family formation with tolerable levels of economic loss and acceptable impacts upon individual aspirations. It is incumbent upon governments to take this action as a third wave of social change because they have facilitated the two major social and economic changes that have led to low levels of family formation.

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