Decision-makers' framing, knowledge and perceptions: Social class and pronatalist population policies in Singapore

Shirley Hsiao-Li Sun, Nanyang Technological University, Singapore
Decision-makers’ framing, knowledge and perceptions: Social class and pronatalist population policies in Singapore

SHIRLEY HSIAO-LI SUN
Assistant Professor of Sociology, Nanyang Technological University
Singapore

Abstract

To explore the relationship between public policies—in this case, pronatalist population policies—and individual fertility decision-making in post-industrial, multi-ethnic Singapore, this paper analyses qualitative data collected through semi-structured individual interviews with women of childbearing age, as well as focus group interviews with their peers, parents, and spouses or prospective spouses. Since 1987, the Singapore government has adopted a variety of incentives aimed at bringing the nation’s population growth back to the replacement level of 2.1 children per woman. The Baby Bonus scheme, with a cash component, was introduced in 2000 and extended in 2004 and 2008. The total fertility rate, however, has persistently declined, reaching a low of 1.22 babies per resident female in 2009. Recurrent themes in the data include the following: First, the rising cost of living and childrearing in Singapore is the predominant lens through which people consider whether policies encourage them to have more children. Second, there seems to be a lack of knowledge about the government’s financial incentives, particularly among less-educated respondents. Third, interviewees point to a bias in key internal elements of the policy: the poor cannot contribute as much as the rich, so requirements for Children Development Account matching funds (in contrast to a universal child and family allowance) increases the capacity of higher-income households to have children. This paper concludes that decision makers’ framing, knowledge, and perceived bias in existing forms of pronatalist incentives are important elements mediating macro-level policy provisions and micro-level individual decision-making.

Keywords: Pronatalist population policies, low fertility, framing, perceptions, communications, Singapore
Introduction

Fertility declined worldwide from 1970 to 2000, particularly among industrialising and newly industrialised countries. For instance, the total fertility rate (TFR) dropped from more than two children in 1970 to fewer than two in 2000 in Northern Europe, Spain, Italy, France and the United Kingdom. In East and Southeast Asia, the decline in birth rates during the same period was even more dramatic; Gubhaju and Moriki-Durand (2003: 1) conclude that “the total fertility rate of around six children per woman in the period 1950–1955 dropped by more than half to 2.7 in the period 1995–2000”. Thus, together with post-industrial countries in Europe, newly industrialised countries in Asia have entered an era of below-replacement fertility (i.e., fewer than 2.1 children per woman of childbearing age).

This paper explores the relationship between public policies—in this case, pronatalist population policies—and individual fertility decision-making. As Saw (2005: 6) notes, “those policies adopted by government[s] to persuade their people to produce fewer children in order to lower the rate of population growth are known as antinatalist policies, while those meant to do the exact opposite are known as pronatalist policies.” More recently, Myrskyla et al. (2009: 742) emphasise the need for further research on the efficacy of “social/family policies” for increasing fertility rates in low-fertility contexts where women’s labour force participation has become the norm.

While there is a rich and substantial body of literature devoted to the question of whether and how pronatalist financial policy provisions affect the level of fertility, relatively little is known about the role of “perceptions” and “framing” in mediating the relationship between such policies “on paper” and individual fertility decision making. Post-industrial, multi-ethnic Singapore is a setting particularly conducive to such empirical investigation because it has seen a decline in fertility rates in spite of pronatalist population policies; TFRs in 2008 and 2009 were 1.28 and 1.22, respectively. I embarked on multilevel in-depth interviews—interviewing women of childbearing age in stages: first as individuals, and then in focus groups comprised of their peers, spouses and extended family members. Analyses based on the in-depth qualitative data indicate the larger framework that Singaporeans adopt in viewing the pronatalist policies, their levels of knowledge regarding the policies, and, finally, how they perceive key internal elements of the policies (e.g., tax rebates and the dollar-for-dollar Children Development Account). Despite the limitations of non-probability sampling, taken together, these findings suggest that decision-makers’ framing, knowledge, and perceived bias in existing forms of pronatalist incentives are important factors in mediating macro-level policy provisions and micro-level individual decision-making.
In what follows, I first provide a brief review of empirical studies on the effectiveness of pronatalist financial incentives. Moreover, as this paper is concerned with a particular type of decision under uncertainty (the number of children to have), a concise review of the theory of choice under uncertainty is also necessary.

**Effectiveness of pronatalist financial incentives**

In terms of cash subsidies, Cigno and Ermisch (1989) found that higher child benefits increased British women’s completed fertility. Using an econometric model for data from 22 industrialised countries from 1970 to 1990, Gauthier and Hatzius (1997: 304) found cash benefits to be positively correlated to fertility. However, this effect had limited magnitude in that “a 25 per cent increase in family allowances would result in a fertility level which is about 0.6 per cent higher in the short-run and about 4 per cent higher in the long-run—that is, an effect of the order of 0.07 children per woman on average”. In Sweden, Bjorklund (2006) examined a policy that offered financial support to families for childbirth and found that, while the policy did help to increase fertility rates, it also induced fluctuations in the “period fertility rate”. Studies of the birth bonus in the province of Quebec, in Canada, also suggest a positive impact on fertility—although, again, at a rather high cost per child. Kim (2007) notes that the Allowance for Newborn Children (ANC) costs more than C$19,000 for one extra birth, which is higher than an earlier estimate of C$15,000 (Milligan, 2002).

With regard to financial incentives in terms of tax breaks, Whittington, Alm and Peter (1990) found that personal tax exemptions had a positive and significant effect on the national birth rate in the United States, and suggested that it would be possible to influence citizens’ fertility decisions to some degree through deliberate changes in tax policies. However, Georgellis and Wall (1992) examined the US tax exemption scheme and found that tax exemptions as a form of subsidy for childbearing increased fertility, but this effect was limited. In sum, most empirical studies seem to suggest that pronatalist financial subsidies have a positive effect on fertility rates.

However, as Gauthier’s (2007) review points out, such impact on fertility trends tends to be limited and varies highly according to the type of data used and type of policy. In addition, studies conducted in Central and Eastern Europe point to the critical importance of the stability of financial support and status of the overall economy in shaping the effectiveness of pronatalist financial measures (Rostgaard, 2004; Stewart and Huerta, 2006; Saxonberg and Szelewka, 2007).
The science of decision making expected utility theory

Decision-making has been understood predominantly from a utilitarian perspective—in terms of the “expected utility theory”, or “normative theory of decision making”. The expected utility theory pertains to the manner in which individuals choose among possible actions under ideal conditions, such as perfect information. As Baron ([1988] 2008: 233) points out, “the normative model states that we [as rational beings] should try to ‘maximize total utility,’ that is, choose the option that will yield the greatest total utility”. Moreover, incentives can be used to encourage certain behaviour, just as punishment can be used to deter it. In relation to childbearing decisions, this theory implies that, *ceteris paribus*, economic incentives lead individuals to rationally choose to have children because doing so brings monetary rewards and increases their total utility.

Bounded rationality

Simon (1947) advanced the study of decision-making behaviour by examining actual decision-making processes in the administration of public recreational facilities in Milwaukee and introducing the notion of “bounded rationality”. As he points out, assumptions of perfect rationality “do not even remotely describe the processes that human beings use for making decisions in complex situations”. He further makes the following suggestion (1979: 501):

> The task, then, was to replace the classical model with one that would describe how decisions could be (and probably actually were) made….

The core notion of limited (or bounded) rationality is that, as March (1994: 9) summarises, “[decision makers] are constrained by limited cognitive capabilities and incomplete information”, and the procedures that Simon (1947, 1979) described are mechanisms that individuals in organisations adopt in actual decision-making processes that result in judgements deviating from what the rational theory of choice dictates.

Prospect theory and the framing of choices

In their path-breaking and now classic body of work on how decisions are made in uncertain situations, Tversky and Kahneman (1981) challenge the classical model of rational choice and present the compelling “prospect theory”. In their 1981 article, they question one of the key tenets of the rational theory of choice: that different representations of the same choice problem should yield the same preference. They present data collected from individuals to show how “variations
in the framing of acts, contingencies, and outcomes” cause decision-making behaviour to deviate from the expected utility theory. As the authors note: “We use the term ‘decision frame’ to refer to the decision-maker’s conception of the acts, outcomes, and contingencies associated with a particular choice” (1981: 453). An oft-cited finding is that “choices involving gains are often risk averse and choices involving losses are often risk taking”, even when the only difference between the choices is how the outcomes are stated or framed (1981: 453). Tversky and Kahneman (1986) challenge another tenet of the rational choice theory—that is, if one option is better than another in one state and at least as good in all other states, the dominant option should be chosen—and show that “whether the relation of dominance is detected depends on framing as well as on the sophistication and experience of the decision maker”.

In short, analysis of framing can help us to better understand factors shaping the decision-making outcome. Wagenaar and Keren (1986) provide an example of the way in which individuals’ “adopted roles lead them to frame the decision problem in a different way”. The decision problem they studied was related to whether the usage of seat belts in cars should be officially required. The authors found that participants in the role of parents were more likely to favour the law requiring the wearing of seat belts when presented with anecdotal information about a little girl who died in an accident but would have been saved had she been wearing a seat belt. On the other hand, participants in the role of public officials were more likely to favour the law when presented with statistical information. In short, social roles may lead to different framing of the same problem.

More recently, the study of “framing” in terms of various social phenomena—ranging from the behaviour of New York cab drivers on busy days to investors’ behaviour when lightening their stock portfolios—has been included in an extensive treatise on themes in prospect theory (Kahneman and Tversky ([2000] 2002). For the purpose of this paper, which explores the relationship between pronatalist policies and childbearing decisions, the way that Beach and Connolly (2005: 22–23) have characterised the concept of framing is instructive: “Framing involves embedding observed events in a context that gives them meaning … knowing the frame the decision maker is using goes a long way in predicting and understanding the decisions he or she makes—which is useful for other people who must interact with the decision maker”. To that end, we now turn to this study, which is primarily concerned with decision-makers’ framing and perceptions.

Low fertility and pronatalist incentives in Singapore

Fertility in Singapore fell below replacement level in 1977, and has remained below, since then. The earlier “Girl or Boy, Two Is Enough” anti-natalist policy
of the 1960s and 1970s officially gave way to pronatalist policies in 1987. During the transition period, the political leadership was concerned not only with increasing the national birth rate to replacement level, but doing so specifically among the higher-educated sector of the population. Hence the “Graduate-mother Priority Scheme”, based on then Prime Minister Lee Kuan Yew’s 1983 National Day speech on the need to redress the “lopsided” pattern of lower fertility among women with tertiary education, was instituted. Should, Yew warned:

Levels of competence will decline. Our economy will falter, the administration will suffer, and the society decline. For how can we avoid lowering performance when for every two graduates, in 25 years’ time there will be one graduate, and for every two uneducated workers, there will be three? (Cited in Wee, 1995: 198)

Earlier studies of pronatalist policies have highlighted concerns with eugenics and class-based differentiation (Palen, 1986; Wee, 1995; Drakakis-Smith and Graham, 1996). For example, in analysing the thrust of the 1983 speech, Wee characterises the historical shift as changing from a “universally applicable” approach to “a differential class-specific pronatalism” (1995: 201). The Graduate-mother Priority Scheme, introduced in 1984, offered priority in primary school registration to children of women with university degrees (i.e., university graduates) or professionals, a move that generated popular resentment. In 1984 the People’s Action Party (PAP) suffered its biggest election losses since 1965. In 1985, the scheme was discontinued.

Since then, there has been no clear and overt educational bias in pronatalist incentives. As Palen (1986: 3) notes,

the initial eugenics-based program introduced in 1984 sought increased fertility for university-educated women and provided major subsidies for the voluntary sterilization of poor and uneducated parents. These much publicized and internationally discussed programs have now been abandoned in favor of new population programs seeking to encourage fertility in lower as well as better educated groups. A 40 per cent population increase is being set as a goal.

In 1987 the government launched policy incentives under the theme “Have Three, or More [Children] if You Can Afford It”. Emphasis was now placed on adequacy of economic resources, rather than parents’ educational qualifications. Drakakis-Smith and Graham (1996: 69) examined the views of Singaporeans toward such policy measures based on a representative survey carried out in 1992. They concluded that “although differences in fertility behavior may be rooted in ethnic identity, the control that the government wishes to exert over that behavior as part of its nation-building project has largely been effected through class interests”.

45
In recent years, further policy amendments have been implemented, with incentives growing wider in scope and more elaborate, aiming at “bringing Singapore’s population growth back to the replacement level of 2.1 children per woman” (Ministry of Education, Singapore, 2007). In 2000 the policy theme was “Strong and Stable Families”, and in 2004, it was changed to “Singapore. A great place for families.” Monetary incentives were organised primarily via taxation, while non-monetary incentives included housing, education and employment (Lin and Rantalaiho, 2003). The government’s actual expenditures on pronatalist policy initiatives doubled, from approximately S$160 million in 2002 to S$358 million in 2005 (Ministry of Finance, various years). In the latest policy expansion, in 2008, Prime Minister Lee Hsien Loong unveiled a series of measures in his National Day Rally speech, including extended maternity leave, which he said would add up to more than S$700 million (US$496 million), “about double what we are spending today on child incentives” (Li, The Straits Times, 2008).

As Quah ([2008] 2009: 64) has shown, “the introduction of incentives to reinforce the suggested pattern of behavior in the target population” is a characteristic of institutional intervention in Singapore. If incentives fail to accomplish expected results, “other steps may be the introduction of disincentives and sanctions as was the case [with] the first population policy”. I identify seven initiatives currently implemented in Singapore that can be categorised as pronatalist financial incentives: income tax relief, tax rebates, childcare subsidies, use of Medisave accounts (i.e., savings in the medical savings account of provident fund savings), maid levy relief and reduction, cash benefits (including the Children Development Accounts), and grandparent caregiver tax relief.

The first five of these (from income tax relief to maid levy subsidies) have been in existence in some form since 1987. The government instituted the two new initiatives (i.e., cash benefits and grandparent caregiver relief) in 2000. The government has also offered non-monetary incentives since 1987 to encourage childbirth. While this paper primarily explores monetary incentives, it is important to note that there have been non-monetary pronatalist incentives developed in the areas of housing, education, health and work-family balance.

Wong and Yeoh (2003) and Anderson (2004) provide comprehensive overviews of fertility policies. Wong and Yeoh (2003: 17–19) conducted content analysis of the pronatalist population policies implemented in 2000, and suggest that such policies promote fertility within what government rhetoric terms the “normal” families of married couples, and that they “strongly implicate the woman by linking her to the area of reproduction”. Anderson (2004) discusses in detail the changes in Singapore’s population policies to illustrate one source of unintended consequences, in which “a policy overshoots its original goal”. Other recent studies on Singapore’s fertility policies have suggested the importance of the macro-level economic situation in influencing individual fertility behaviour. For example, Graham, Teo, Yeoh and Levy (2002: 82–83) interviewed eight
Singaporean-Chinese college-graduate women between the ages of 27 and 38 years, as well as their mothers—ranging in age from 49 to 70—and found that a recurring motif in [the older generation’s] life stories is that young women of their generation did not have the time or opportunity to make choices as their energies were spent on ensuring that their families were supplied with the basic necessities of food and housing .... [T]his is a reminder that we have paid scant attention to the changes in economy and society more generally which have allowed or even encouraged women to make choices .... None of our graduate interviewees thought the financial payouts had been a decisive influence in their fertility choices.

Yap (2009: 167) statistically decomposed the change in TFR over the 2000–2005 period and concluded that “the decline in marital fertility rates suggest[s] that married Singaporeans have not responded to the Government’s efforts”. These studies suggest the ineffectiveness of pronatalist incentives in encouraging childbearing behaviour. What might explain such ineffectiveness? In general, what might be the specific linkage between macro-level state policies and micro-level individual childbearing behaviour? These are empirical questions that cannot be addressed if the analysis remains at the macro level.

Perhaps more importantly, the notion of “a differential class-specific pronatalism” no longer seems relevant. Indeed, studies of Singapore’s population policies tend to treat Wee’s (1995) concern as representing a “phase” of the past, aborted due to voters’ protests and dissatisfaction. Burleigh (2000) includes one line on Singapore as an example of a country with a history of eugenicist policies. Lay, Monk, and Rosenfelt (2002) mention Singapore’s Graduate-mother Priority Scheme’s favouring of tertiary-educated women as mothers as an example of how the lives of women could be shaped through state policy. Thang (2005) describes the 1970s and 1980s as the overt eugenics phase of Singapore’s population policy and emphasizes that the policy “was soon seriously modified after voters registered their dissatisfaction through significant withdrawal of support for the PAP (People’s Action Party) government at the 1984 General Election” (Chua, 1997, cited in Thang, 2005: 82). Have policy changes—regardless of the intentions of policy makers—invalidated the observations of Palen (1986), Wee (1995), and Drakakis-Smith and Graham (1996)? How exactly have pronatalist policies advanced since 2000 been perceived and received by citizens? This paper attempts to answer these questions, particularly in relation to these policies’ financial incentives component.
Methodology

The idea behind this study’s multistage qualitative research design is that people tell different stories about their motives and planned actions in different contexts, particularly in the contested social arenas of action and decision making concerning life-altering events. These questions about the intersections between macro-level and micro-level factors cannot be answered with decontextualized instruments such as survey questionnaires, because such survey measures are administered in an unknown and unknowable social vacuum, in which feedback is necessarily assumed, rather than explored and examined.

Existing studies show that Singaporeans treat childbearing decisions as “private” and “personal” (Graham, 1995; Teo and Yeoh, 1999). The implication is that respondents may not speak freely about such decisions if there is little or no trust in the researcher. To overcome the issue of trust and attendant difficulty of access to interviewees, I first recruited 11 research assistants who were senior university students (seven were Singaporean-Chinese, two were Singaporean-Indians, and two were Singaporean-Malays). Each of these then contacted 15 interviewees who were women of childbearing age, the stated target group of the pronatalist population policies. These research assistants carried out a semi-structured interview schedule, which I proposed and revised based on the pilot study, with 165 women aged between 19 and 49. These interviews constitute the first stage of data collection.

In total, 165 women were interviewed, with each interview lasting 30–45 minutes. The average age of respondents was 27; 114 (69.1 per cent) respondents were unmarried individuals, and 51 (30.9 per cent) were ever-married individuals; 105 (63.6 per cent) self-identified as Chinese, 32 (19.4 per cent) as Malays, 24 (14.5 per cent) as Indians and 4 (2.4 per cent) as “Others”; 60 (36.3 per cent) respondents did not have any university education, and 105 (63.6 per cent) had received or were receiving university education during the interview period; 131 (79.4 per cent) lived in government-subsidised flats (Housing and Development Board units), and 32 (19.4 per cent) lived in private residences including condominiums and landed properties (2 interviewees declined to disclose their housing type). Finally, in terms of monthly household income, 40 (24 per cent) individuals lived in lower-income households with monthly income below S$3,000; 85 (52 per cent) lived in middle-income households with monthly income of S$3,000–7,999; and 38 (23 per cent) lived in higher-income households with monthly income above S$8,000 (two interviewees declined to reveal their income).

It is important to point out that proportions of higher-educated and minority respondents in the interview sample are higher than in the national census sample. This is likely a function of the sampling strategy adopted in my study, i.e., locating interviewees through research assistants who are young...
university students. In addition, the proportion of unmarried interviewees in the sample is higher, as marriage rates decrease for better-educated subgroups.\textsuperscript{iv}

Once an individual woman felt comfortable with the topic, I asked her to participate in the second and third stage of focus group interviews together with the individuals whom she had identified in her survey answers as having had a strong influence on her childbearing decisions. As Morgan (1997: 46) writes,

\begin{quote}
the point of doing a group interview is to bring a number of different perspectives into contact. Until they interact with others on a topic, individuals are often simply unaware of their own implicit perspectives. Moreover, the interaction in the group may present the need to explain or defend one’s perspective to someone who thinks about the world differently. Using focus groups to create such interactions gives the researcher a set of observations that is difficult to obtain through other methods.
\end{quote}

In the second stage, focus group discussions were held with women and their husbands or boyfriends, and, in a few cases, good friends of the same sex. In the third stage, focus group interviews were conducted with the women (and/or their significant others) and their parents or parents-in-law. Discussions usually lasted 60–90 minutes. All participation was voluntary, and respondents who participated in the second and third stages provided their written demographic information after the discussion.

In sum, I conducted 39 focus group interviews. Typically there were four to six participants in each focus group interview, including myself as the moderator and the research assistant. While interviews in the second stage were carried out either at respondents’ homes or in an interview room at the author’s university, all interviews in the third stage were at the respondents’ homes. In sum, 204 interviews were carried out from October 2007 to July 2008, involving 221 Singaporean interviewees (including the partners and family members of the 165 women). All 204 interviews were audiotaped, transcribed and translated. Three coding teams, consisting of five research assistants and myself, independently coded all transcripts. Details of interview questions and coding scheme are presented elsewhere (Sun, 2009).

In an attempt to ensure adequate representation of ethnic minorities in this project, the minimum number of respondents from the Singaporean-Indian and Singaporean-Malay communities was set at 30 for the larger sample. The number of respondents from these two communities exceeded the minimum requirement. In addition, the larger sample reflects the national profile along the key dimension of monthly household income level. According to official data, 20–30 per cent of employed households had an average monthly income below S$3,000, and 20–30 per cent of such households had an average monthly income above S$8,000 in 2006 and 2007 (Singapore Department of Statistics, 2008). However, the voices
and experiences of male citizens, less-educated citizens (i.e., citizens with below-secondary education), and lowest-income citizens (i.e., citizens with less than S$1,000 monthly household income) remain insufficiently represented in this study.

Despite the non-representative nature of the sample and attendant limitations of generalizability, there are suggestive patterns. Extensive quotations or excerpts presented as voices of citizens are front and centre in this research. Respondents are referred to by pseudonyms for reasons of confidentiality; married respondents are referred to as Mr. and Mrs., while unmarried respondents are referred to on a first-name basis. When I quote from interview data, I retain the original words of respondents, including “Singlish”—a local version of English—and provide clarification where necessary.

Findings

In the following section, three themes are highlighted. I first report patterns observed from the data of the 165 women, and then draw from both individual and focus group interview data to flesh out each theme.

The predominant frame

The first recurring response to government policies is the explicit recognition that Singapore is an expensive place to raise children. This constitutes the frame within which individuals consider whether government policies encourage them to have more children. Ninety-six of the 165 interviewees mentioned the high and rising cost of living in Singapore as a concern. More important, and interestingly, those respondents who did mention the rising cost of living tended to have reservations concerning the effectiveness of financial incentives in their responses to the following survey question: “Is the government policy making it easier financially for people to have more children?” Some straightforwardly said that the government subsidies had not made it financially easier to have children. In sharp contrast, those who did not mention concerns about the increasing cost tended to respond to the question positively.

Thus, on the one hand, interviewees express appreciation for the Baby Bonus scheme; on the other they give reasons for why the amount is insufficient—a phenomenon similar to what Krugman described as “too little of a good thing” when analysing the American Recovery and Reinvestment Act (Krugman, 2009). For instance, Mrs. Ang (Chinese, monthly household income S$6,000–6,999) is 46 years old and has a son and a daughter. When asked to identify which policies were working to encourage childbearing and child rearing, she stressed that policies “all work”, but went on to say: “They work, but just help
a bit … Because the inflation and the standard of living is much greater than what these policies help, you see”. Similarly, even though her husband “wants one football team”, 33-year-old Mrs. Yatim (Malay, S$3,000–3,999) said, “two is just nice, one girl and one boy is just nice for me”. She added, “The cost of bringing up children in Singapore is too high …. And the medical fees [and] whatever things. Even your daily necessities for the kids, their education, you know”.

It is not just the increase in general living expenses, but also specific and immediate costs for newborns—e.g., diapers, milk and vaccinations—that discourage more births. Mr. and Mrs. Balasingam, both 34 years old, with two children and a monthly household income of S$4,000–4,999, explained why the S$6,000 baby bonus subsidy for the third child was not attractive:

Mr. Balasingam: So after we have our third child they give us S$6,000 cash, OK. Does the government know how much it costs when a baby is just born?

Mrs. Balasingam: First year [the baby bonus is] already exhausted. Pampers … napkins … do you know a bottle of soap that we use to wash the baby’s milk bottle, it’s about S$14–15 a bottle and it lasts about a week and a half. And you have so many other things to buy. All this requires cash, not to forget you need someone to help with the babysitting, certain kinds of food, children’s vaccination, and there are a lot of nitty-gritties which are not calculated. You bring your child to a clinic, [and] you got to take a cab back if it’s a newborn. All these are also costs.

In other words, seen through the frame of rising prices of goods and services, the government’s baby bonus subsidy is perceived and experienced as a form of reimbursement or compensation, rather than as an extra benefit for having a child. As noted earlier, approximately two-thirds of the 165 interviewees mentioned cost of living as a concern. In short, although interviewees view economic incentives positively, they would like to see significantly larger increments and more long-term subsidies in light of high and rising costs of living.

Knowledge of government policies

The second consistent finding is that details of government policies are vague, unspecified or simply unknown among citizens. Even for the better-publicised Baby Bonus scheme, only approximately one in five of the 165 respondents could provide details such as the bonus amount or time frame of such benefits in their answers to the following list of survey questions:
“Was there anything the government did that helped you decide to have a child/children?” (Married respondents)

“If you are deciding whether to have a child, is there anything the government can do that will help you decide?” (Unmarried respondents)

“As far as you know, has the government done anything to help families in Singapore? If so, can you please tell me what the Singapore government has done? If not, what do you think needs to be done by the government to help families?”

“As far as you know, are there any government policies that encourage people to have more children? If so, can you please tell me what those policies are? Which policies do you think actually work? Among these policies, which one(s) do you think are not working? If not, what needs to be done by the government in terms of policies to encourage people to have more children?”

In answering these questions, the majority (70 per cent) of respondents either knew only catchphrases for policies without further details, or were completely unaware (12 per cent). This finding of limited knowledge of pronatalist policies is consistent with Straughan, Chan and Jones’ (2009) study, which notes that “while almost 40 per cent were well informed about the new family policies, it is interesting to note that almost a quarter had not heard about the new initiatives at all. Given the limited geographical expanse of this nation-state and the communication channels in place, this is indeed surprising” (p. 193).

In what follows, I report on an extensive focus group interview with 36-year-old Mazlan (Malay, polytechnic diploma, S$3,000–3,999) and his girlfriend, Jamilah (Malay, other diploma, S$3,000–3,999), to illustrate how “word-of-mouth” dissemination may disadvantage respondents in less-educated households. When probed about the “lower maid levy” initiative, Mazlan showed no knowledge of the policy or its details, and asked in Singlish, “Is it been published in the newspaper for all these?” Speaking for himself and his friends, he said:

It’s very hard for us even to take notice. Because some of them [my friends], they don’t read newspaper daily. Like those from the lower income, even to buy the newspapers at 80 cents, 90 cents. For them, it is still a lot. I got a friend who earns a certain [low] amount. He doesn’t know about all these things, about this baby bonus thing or whatever it is. So he came to know about it when he met the MP [member of parliament] to ask for help. The MP tell him about this.

When asked why his friend did not know about the policies, Mazlan said:
He doesn’t because he don’t [sic] read newspapers. I think he don’t know how to read newspapers. The problem is, the word of mouth, the things have not been channeled all the way down …. Actually he has three kids … He borrows from neighbours, relatives in order to survive on staple food, which eventually, all these things add up to this. So what I think is that he just seeks help from the MP and that is when he knows all these things.

It may not be surprising that there are citizens who cannot make ends meet and have to resort to loans and government subsidies; what this instance suggests is that these may also be citizens who lack knowledge about pronatalist policies. Jamilah added:

They are not informed of all these, I guess … It’s not based on the policies that they want to have children. It’s not by [i.e., due to] things that the government is doing. They decide they themselves want to start a family. But it’s not possible, because it gets harder, and the thing is that they do not know about the policies, and it’s not helping. They are struggling.

In a focus group interview with a dual-income Chinese married couple with a combined monthly household income of S$4,000–4,999, Mr. Khaw, a 30-year-old university graduate, told of the surprisingly low take-up rate of “free computers”. This provides a further illustration as to why it is difficult to disseminate information on policies among the less-educated households:

Even with all the [baby bonus] subsidies and all, some parents may not be aware that they can go, and these people who are not aware may not be educated people who can read what you give to them … brochures and all … I mean, I know because right now we have this funding to give to students with no computers a computer, and it’s free. We give them forms and documents, but the take-up rate is low. Because these forms … so many words … given by the government. They can’t read the forms. So they think that they have to pay for the computer, then they don’t want it. You know, they don’t understand. So we have to create ways where we actually invite them to come, and we explain to them verbally and let them know this is free. And then on the spot they go and …. Then the take-up rate is more. It’s definitely important to let the lower income know, especially …. The educated, if they are retrenched, they’ll be able to understand these policies and all.

What the above exchange suggests is that policy information is not readily available to members of less-educated households, making it a less likely basis for their decision making. The desire for the state to be more effective in
communicating its policies is poignantly crystallised in a focus group discussion with a middle-income Chinese couple. Mr. Goh (age 44, university graduate, S$3,000–3,999) and Mrs. Goh (age 43, stay-at-home mother) have three daughters. Mr. Goh said:

Correct me if I’m wrong. Our government way of doing things is like I’m not going to spoon-feed you, to bring the money to your account per se. You have to come and find out and take whatever you need. I think this is more cost-effective, more cost-efficient, fair enough. So how am I going to know if you’re not going to bring the information to me? After all, not many people are going to read and find out information, like say, if you’re going to have a fourth child, you go and find out. But so tired, the whole day is enough. Ask me to find out more information? Oh please.

In other focus group discussions, respondents provided further insights into ways for the government to help raise awareness of pronatalist benefits. For example, while at the moment married couples tend to learn of such policies at the hospital, they wish to be informed at an earlier stage, for instance, at the gynaecologist’s clinic. Mr. Khaw explained:

Generally, what happened is, I say prior to all these, we hear about it. So then we go online, check what baby bonus is all about. Then they have their website and we look through it. Then more information, actual information only came about at the hospitals, when the child was born, then suddenly there’s this package given to us. [But] I think it would have been better if like for example at the clinics, all the different gynaecologists that we go, they already give us the advance preparation.

[Interviewer: Why?]

Because at least during the whole nine months’ process, at least we can start to understand the whole thing rather than at the registration; it’s more or less like just filling in forms to get the money, more than what we are able to plan for. So that’s why if you do it at a gynaecologist, like prenatal stage, at least you know these are the things that are covered. By the time [of the baby’s birth] I’ll be busy and alone, she’d be bedridden, she’s in bed. I’ll also have to run around entertaining people who come and visit; then there’s not really much chance for me to really look into it.

This idea of disseminating state pronatalist policies at the clinics was shared by Jamilah, who further suggested that it “should be made automatic”: 
Only those who are educated and who know about it will apply for it. It should be made automatic. As in it’s there, you want it, you take it. If you don’t want it, you say you don’t want, rather than you opt in to be in it. Make it automated, once you have a baby. Because [the baby] is registered already. So as in make it for this baby, and then send the information to the parents. So if they do not want they decline.

University students also suggested targeting younger adults. Indeed, respondents engaged in dialogue and suggested specific ways of addressing the issue of information dissemination, such as posting information on residential buildings’ noticeboards, mailing pronatalist policy packages to newlywed couples as “reading material” and having “a web page in the Registry of Marriage portal”—rather than discussing it in the annual National Day Rally speech, which, according to Hui Ling (Chinese, S$2,000–2,999), “people hardly listen to”.

**Perceived class differentiation in existing economic incentives**

The third repeated finding from this study is a perceived and experienced bias in existing economic incentives such as tax rebates and the dollar-for-dollar matching fund, the Children Development Account (CDA).

(i) **Responses towards tax rebates**

As Lin and Rantalaiho (2003) point out, tax rebates constitute the primary form through which the Singapore government delivers its benefits. The majority of interviewees did not make evaluative comments about the government’s tax rebates in their answers to the survey questions listed earlier; indeed, only 13 of the 165 interviewees did so (11 had positive comments, while 2 had negative comments). Such a number is certainly too small to draw any conclusions from. However, it is worth noting that while only 1 in 5 among the 165 interviewees owned or resided in a private condominium or landed property, the ratio was 3 in 5 among the respondents with positive comments on tax rebates. In other words, respondents from wealthier households disproportionately constitute those who praise tax rebates as a form of pronatalist financial subsidy in this sample.

This pattern also rings true in the focus group discussions, where married couples who respond positively to the tax rebates tend to come from wealthier backgrounds. For instance, when I asked an upper-class Chinese couple who had landed property, a combined monthly household income of more than S$10,000, and an only daughter, what policy initiatives were helpful, Mr. Owyong replied:
“I would say only the income tax portion … yeah, the income tax’s kind of relief that the benefiting the people having more than one kid or two kids.”

Similarly, in another focus group discussion with a Chinese couple in their 30s living in a five-room HDB (Housing Development Board) flat, with a combined monthly household income of more than S$10,000, when I asked, “When you gave birth to the first child, what kind of policies were in place? What was your experience?” Mrs. Lee explained, “I guess it’s only the income tax, I think. It’s the income tax. Child relief.” Mr. Lee followed up with: “If it’s there, of course it gives benefits. It’s positive, but again it does not affect our decision to have how many kids.”

As observed in focus group discussions, while respondents acknowledged that they benefited from the tax rebates, they stressed that these were not the reason for them to have a first or an additional child. Additionally, tax rebates are materially irrelevant for childbearing and child-rearing dynamics in less-wealthy households, as indicated in the following conversation with a Chinese couple in their 40s, living in a three-room HDB flat and earning a combined monthly income of S$2,000–2,999:

Mrs. Chong: This tax rebate programme is only useful for people with higher pay. How much tax can be deducted from people of the middle class like us? Honestly speaking, they have not deducted a cent of tax for my employment of more than ten years, because there is nothing for them to deduct. The same goes for him [referring to Mr. Chong].

Mr. Chong: If our society continues to work this way, honestly speaking, the people will only make one move. It is to sell their houses and strike out for themselves new paths in another country. They will all migrate and leave Singapore if they manage to find a good place. There are many who already doing this. They moved together and not singly …. In the case where we wish to increase our population, regardless whether one is poor or rich, there can be a scheme where all the people can bring the child’s birth certificate to claim the milk powder subsidised by the government. Whether the child needs two-and-a-half or three years of supply, purchase the milk powder with the birth certificate. It should be equal to all regardless of race. Education is free for all, be it Chinese and Malay. As long as you are Singapore citizen, it is free.

This theme is further illuminated by Mr. Balasingam, introduced earlier, who explained:

Do you know how much you have to earn a month to be liable for tax? I
think a yearly income of about S$22,000. S$20,000 to S$22,000 income for one person to be liable for income tax. I can tell you there are a lot of people out there who do not meet that criterion.

Indeed, Singapore residents have to earn an annual chargeable income of more than S$22,000 to be liable for tax (Inland Revenue Authority of Singapore, 2008). In other words, average monthly income has to be roughly S$1,833. According to the 2005 General Household Survey, 70 per cent of the resident population has an average monthly per capita household income of only S$1,580, which means no tax and, therefore, no tax rebates. In short, respondents are able to articulate what they perceive to be a bias in the policies: private-property-owning citizens find tax rebates helpful and beneficial, but these are immaterial for less-wealthy households.

(ii) Responses to the dollar-for-dollar Children Development Account

As noted above, there are two components to the Baby Bonus scheme instituted in 2000. All parents, regardless of family size and income, receive lump-sum cash benefits of S$4,000 for their first and second child, and S$6,000 for their third and fourth child. In addition, the Singapore government provides Children Development Account (CDA) matching contributions. In 2008 the government announced that while the fifth child and beyond were not eligible for cash grants, the government would provide a matching contribution of up to S$18,000 for them.

The majority of the 165 individual female respondents did not make evaluative comments concerning the CDA; only 11 did (9 respondents had negative comments, while 2 had positive comments). Again, such small numbers do not allow for any conclusive statements. But it is worth noting that among respondents who had negative comments, none had a monthly household income exceeding S$7,000, while the only two respondents with positive comments did.

During focus group interviews with married couples who had used the CDA, it became clear that even respondents from middle-income households had difficulty saving and benefiting from the scheme. When asked about the CDA account, Mrs. Balasingam showed that she understood it was a “dollar-to-dollar match”. But her husband also noted the following in response to her saying that they “don’t have that extra money [that they] still have to put in [so that] the government would top it up”:

That’s [i.e., CDA] not money in your pocket. So eventually I still have to come up with 50 per cent. I take my cash, and I put it in the bank. The bank gets the money, the government tops it up. But until that money is exhausted, I can’t take back 50 per cent of my money … which means I’m still cash-poor … I have to still come up with the money at the beginning.
What I’m saying is … why do they want people to come up with the money in the beginning?

Mrs. Balasingam added:

But it’s not all … it depends on your earning income, right? It depends on how much you’re earning; not all parents can top up $50 a month. So if it’s going by the rate of a dollar-per-dollar match, the more you put in … of course the more you benefit. But I got other things to worry about day to day. I can’t think about how I can keep this money in the bank for future use when day to day is already a problem for me.

Similar observations are made by other respondents. For instance, Mr. and Mrs. Lee, the Chinese couple with a combined monthly household income of more than S$10,000 who commented on the tax rebates, above, also reflected on the CDA scheme. Mrs. Lee said:

I think Singapore government is very careful even when they give benefits. Other than the $3,000 cash, they have another which is top up, dollar-matching. That is provided that if you have the money to. So not many families can enjoy that, especially the lower income, so at the end of the day the government is careful in a sense that …. They [i.e., the government] are too careful. I mean, they won’t want low-income families to have very large, many kids in that sense, so I only see that unless you have the money that you can put it in the bank then you get the additional money from them …. You must hit a certain income ceiling in order to enjoy such benefits. They are very careful with their spending, that’s about it. So they want to help, but they are very careful who should be the ones having babies, in that sense. Very strange.

Mr. Lee added:

So you get half measures; basically you end up with something like we said that is good if it’s there, but it doesn’t really … It doesn’t push you to decide to make babies.

Rahimi, an unmarried 27-year-old Malay respondent with a polytechnic diploma, living in a five-room HDB flat, with a monthly household income of S$3,000–3,999, articulated how “disposable income” mediates the effectiveness of the CDA scheme:

We have problems in disposable income. It’s not a problem of all these subsidies and funds. The problem is disposable income, so if we can’t
survive with our disposable income then we are screwed. That’s the way we see it. We need to increase disposable income; that’s what we need, and that’s what will help. The problem is disposable income. That, I think, that’s the main thing. So even if all these funds, Edusave, is in a frozen, so-called frozen. Everything is all frozen, so we can’t make use of this money. And we have talked to some families who knows of all these funds, but this is so-called future. So what about now? How can we talk about future when we can’t survive now?

What Rahimi understood about the disposable income and what Mr. Lee characterised as the logic of “half measures” does not escape lower-income respondents; indeed, this logic has greater financial implications for them. For example, Mazlan, who told of his friend not knowing about the policies, said, “What I heard is that, for example, if we save a certain amount, the government will match also the amount. It’s very hard for us to [save]”.

Such observations resonate with the logic of what Brown et al. (2003: 22–23) have termed “accumulation versus disaccumulation”. “Accumulation” means that “very small economic and social advantages can have large cumulative effects over many generations”, while “disaccumulation” refers to the less-understood fact that economic disadvantages can also be compounded over time. On the other hand, children in well-off households benefit not only from their parents’ higher disposable income but also from the state’s financial contributions. Thus, the CDA scheme is perceived to play a role in the intergenerational accumulation and disaccumulation of privileges.

In summary, interviewees point out that parents have to use cash to cover items such as education and medical bills that are immediate day-to-day worries. Such expenditures reduce the amount of savings that can be put into the CDAs. Only families who can cover the basic expenses listed above can benefit from the matching fund scheme while maintaining savings and cash liquidity.

Conclusion

This paper is concerned with citizens’ fertility decision-making and the role (if any) of the government’s public policies in that decision-making. I suggest that the gap between the stated pronatalist policy goal and the outcome of persistent low fertility is at least partly a function of (a) the larger framework in which pronatalist incentives are understood, (b) the channels through which such policy information is disseminated and learned, and (c) the key forms through which financial benefits are distributed and perceived.

First, respondents’ perceptions of cost of living are found to be inversely related to their responses to policy effectiveness with respect to their fertility decisions. Second, respondents with a lower level of education (without a
university education) are more likely to be completely unaware of such financial subsidies than their counterparts with a university education. Third, there is a perceived class bias in the implementation of existing financial incentives; the perception of the effectiveness of tax rebates is inversely related to property ownership, while the perception of the effectiveness of the Children Development Account matching fund is inversely related to respondents’ monthly household income.

The high and rising cost of living provides a lens through which citizens consider whether government policies encourage them to have additional children. This finding lends support to the theoretical importance of the concept of “framing” in understanding decision-making behaviour. While economic growth in Singapore has been generally positive since 2000 (with the exception of the year 2001), with 8.8, 6.6 and 7.9 per cent growth rates in 2004, 2005 and 2006, the fertility rate has remained constant, at around 1.25 per woman of childbearing age. This study suggests that policy effectiveness is at least partly a function of citizens’ interpretation of policies in relation to inflation associated with economic growth. Which specific dimensions associated with economic recession would shape citizens’ responses is an empirical question, although respondents do note that job insecurity, not deflation, sets the frame in times of recession.

Interview data also show that there is a lack of awareness of various government policies, including the essentials of the Baby Bonus scheme—a policy with the explicit goal of economic support for having a child, particularly among less-educated groups of women of childbearing age. This seems to be an example of “bounded rationality” and further indicates characteristics of groups most affected by the lack of information. Responses suggest that there is a need to disseminate detailed information about pronatalist incentives to reach people in earlier stages of decision making, prior to childbirth in hospitals. Moreover, it is important to broaden the channels of communication, via, for example, mail and posting on noticeboards in residential buildings, a communication factor that has not been emphasised in the existing literature. Given that the Singapore government is keenly aware of the critical importance of disseminating such information, the finding that its pronatalist message has not gotten across may have wider implications for other countries, as well.

Finally, respondents in this study point to perceived class bias in policy mechanisms. On the one hand, respondents who reside in or own private properties disproportionately constitute those who praise tax rebates as a form of pronatalist financial subsidy. On the other hand, the poor cannot contribute as much as the rich, so the requirement of matching funds (in contrast to a universal child or family allowance, as instituted in Denmark, Sweden and Finland) is perceived as increasing the capacity of higher-income households to have children. Thus, I suggest that a de facto “differential class-specific pronatalism” (Wee, 1995; cf. Palen, 1986; Drakakis-Smith and Graham, 1996) continues to be in effect, although it is neither represented as such in policy statements nor analysed.
as such in recent studies on Singapore fertility policies. Perhaps more importantly, household income inequality increased in the 1990s. By the year 2000, when the Baby Bonus scheme was first introduced, the gap was dramatic: “the ratio of the average income of households in the top 20% to that of households in the lowest 20% rose from 11 in 1990 to 21 in 2000 …. Households in the top 20% accounted for larger shares of the total income—from 48% in 1990 to 51% in 2000” (Singapore Department of Statistics, 2002).

As for the debate on the effectiveness of different measures of financial subsidy noted above, this study lends evidence to the claim that tax rebates are positive but limited in their reach. Cash subsidies, if given generously and over the long term, help to directly address concerns about rising costs of living and are positively associated with individuals’ fertility decisions. Future studies might examine the relative weights of lump-sum payments and income-dependent benefits for individuals in different income categories or statistically compare total benefits for several types of families in a national representative sample. Last but not least, this paper has focused on the role of state financial incentives in individual fertility decisions. For a holistic analysis, one needs to take into consideration other institutional factors (such as provisions in work-family balance) as well as cultural factors (such as gender relations and parent-child relations) in understanding pronatalist population policies and individuals’ fertility decisions.

References


Fertility Promotion: A Case of Family Policies and Fertility Trends in Singapore”,


Notes

i Measured as monthly household income.

ii The exchange rate for the year 2008 was, on average, S$1=0.34UK Pound.

iii Singapore Department of Statistics, 2001, Singapore Census of Population 2000. Total resident population: 3,273,363 persons, including 2,513,847 (approx. 77 per cent) Chinese; 455,207 (14 per cent) Malays; 257,866 (8 per
In terms of the 1,159,597 female resident non-students aged 15 years and over by highest qualification attained: No qualification 277,679 persons (approx. 24 per cent); primary 140,173 persons (12 per cent); lower secondary 113,347 persons (10 per cent); secondary 286,352 persons (25 per cent); upper secondary 106,930 persons (9 per cent); polytechnic 52,690 persons (5 per cent); other diploma 48,618 persons (4 per cent); and university 147,598 persons (10 per cent). It is important to note, however, that 82 per cent of residents aged 25–34 years had obtained at least secondary qualifications. Proportions of university graduates among this age group improved significantly—from 7 per cent in 1990 to 24 per cent in 2000.

According to the Singapore Census of Population 2000, proportions of married females among “resident non-students aged 15 years and over by highest qualification attained” were: below secondary 69 per cent, secondary 71 per cent, post-secondary 60 per cent, and university 58 per cent. Moreover, the proportions of singlehood for female Singapore citizens in the age groups 20–24, 25–29, 30–34, 35–39 and 40–44 were 86.6 per cent, 45.5 per cent, 21.9 per cent, 16.2 per cent and 14.1 per cent respectively (Singapore Census of Population 2000: 3).

In the larger sample of 221 interviewees, 7 reported no formal qualification or only primary school level qualification, 20 reported secondary, 21 reported upper secondary, 46 reported polytechnic and other diploma, and 126 reported having or receiving a university education. Seven of the 221 interviewees reported having a monthly household income below S$1,000, which was equal to 3.2 per cent of the valid responses.

Specifying the economic contexts in which the financial incentives are perceived and responded to by citizens may be more important than it seems if we take into account what macroeconomists have noted of the relationship between inflation and unemployment rates—in particular, the Phillips curve. As Bade and Parkin (2007) explain, “the short-run Phillips curve presents a trade-off between inflation and unemployment because, along a given curve, a lower unemployment rate can be achieved only by paying the cost of a higher inflation rate, and a lower inflation rate can be achieved only by paying the cost of a higher unemployment rate.” In other words, the ideal scenario of low inflation and low unemployment seems theoretically impossible according to the rules of macroeconomics. This suggests that governments’ pronatalist
financial incentives need to be fine-tuned to the predominant larger economic context in order to be effective.