

## Social Egg Freezing: Should It Be Permitted In Singapore?

### Introduction

Flames towered from overturned police vehicles, an angry mob hurled bottles, metal grates and pieces of road dividers at law enforcement personnel.<sup>1</sup> Not a scene one might expect in typically peaceful and orderly Singapore. But on 8 December 2013, Singapore experienced its first major riot in over four decades, after a fatal accident involving a foreign worker.<sup>2</sup> Twenty-eight individuals were charged and 53 foreign workers were deported for their involvement in the riots<sup>3</sup>. This was the most dramatic public disturbance involving foreign nationals in recent times, but not the only one. Earlier in 2013, 100 Malaysians had gathered at the Merlion Park, a popular tourist attraction, to protest against the outcome of the Malaysian parliamentary elections. Twenty-one Malaysians were arrested.<sup>4</sup> A few months before, at the tail-end of 2012, two Mainland Chinese crane operators staged a high-rise protest at a construction site, just 10 days after a separate illegal work stoppage by Mainland Chinese bus drivers – Singapore’s first industrial strike since 1986.<sup>5</sup>

These incidents highlighted the social costs of a population strategy dependent on foreign labour and immigration, adding fuel to fire for citizens already indignant over a government

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<sup>1</sup> Neo Chai Chin and Ashley Chia, “Little India riot: 18 injured, 27 arrested”, *Today Online*, December 8, 2013, <http://www.todayonline.com/singapore/riot-breaks-out-little-india?singlepage=true>.

<sup>2</sup> On 8 December 2013, a riot involving about 400 mostly South Asian foreign workers, broke out after a coach knocked down and killed an Indian national in Singapore’s Little India. A total of 25 emergency vehicles were damaged, including 4 that were set on fire. 39 police officers, 4 Singapore Civil Defence Force personnel, as well as a Singaporean coach driver were injured.

Taken from “Little India riot: Two more charged in court”, *Today Online*, December 14, 2013, <http://www.todayonline.com/singapore/two-more-charged-over-little-india-riot>.

<sup>3</sup> Sharon Chen, “Singapore to Deport 53 Foreign Workers After Little India Riot”, *Bloomberg*, December 18, 2013, <http://www.bloomberg.com/news/2013-12-17/singapore-to-deport-53-foreign-workers-after-little-india-riot.html>.

<sup>4</sup> AFP, “Singapore arrests 21 Malaysians in election protest”, *Yahoo News*, May 11, 2013, <http://sg.news.yahoo.com/singapore-arrests-21-malaysians-election-protest-152141052.html>.

<sup>5</sup> -----, “Chinese workers stage new protest in Singapore”, *Yahoo News*, Dec 6, 2012, <http://sg.news.yahoo.com/chinese-workers-stage-protest-singapore-082255106.html>.

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This case was written by Michelle Khoo under the guidance of Assistant Professor Erin Kim Hye Won, Lee Kuan Yew School of Public Policy (LKY School), National University of Singapore and has been funded by the LKY School. The case does not reflect the views of the sponsoring organisation nor is it intended to suggest correct or incorrect handling of the situation depicted. The case is not intended to serve as a primary source of data and is meant solely for class discussion. This case is based largely on publicly available sources and actual events, but some characters and events have been altered for the purposes of this case study. This case won First Prize in the LKY School Case Writing Competition 2013.

estimate of a 2030 population consisting of almost 50% non-citizens. Singaporeans themselves staged a mass (legal) protest in February 2013, involving an estimated crowd of 4,000, in response to a Population White Paper released in January and endorsed by Parliament.<sup>6</sup>

Yet, Singapore's fast-ageing population and shrinking citizen labour force remain a very real problem. Modern Singapore's founding father Lee Kuan Yew said the declining fertility rate remains the biggest threat to Singapore's survival.<sup>7</sup> Despite a slew of monetary incentives, public education campaigns, and even a government agency dedicated to playing cupid,<sup>8</sup> Singapore's total fertility rate continued to languish, leading even Mr Lee to throw up his hands in despair.

A group of high-powered women claimed to have found one possible solution to Singapore's population paradox. An advocacy group from the Association of Singapore Women Professionals<sup>9</sup> (ASWP) was lobbying for the government to permit a woman to freeze her eggs for later use, extending the number of fertile years where she can have children. Breakthrough medical technologies for oocyte cryopreservation now enable a woman's eggs (oocytes) to be extracted, frozen, and stored. Might social egg freezing, or elective oocyte freezing (EOF), stem the decline in fertility rates, increase the economic potential of women, and even promote gender equality in leadership?

Sandra Tan, a Policy Officer in the Family Development Unit of the Ministry of Social and Family Development,<sup>10</sup> was asked to meet with the group from ASWP, research the issue, and prepare a policy recommendation report on EOF.

Sandra was feeling nervous about the meeting. Based on colleagues' accounts of previous interactions with ASWP, she knew dealing with such advocacy groups was not always easy as they could sometimes be quite pushy. She also had to make sure she communicated her thoughts carefully, so that her words were not misconstrued and she did not misrepresent the

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<sup>6</sup> Yahoo! Newsroom, "4,000 turn up at Speakers' Corner for population White Paper protest", February 16, 2013, <http://sg.news.yahoo.com/huge-turnout-at-speakers--corner-for-population-white-paper-protest-101051153.html>.

<sup>7</sup> AFP, "Singapore's Lee says not to blame for low birth rate", August 6, 2013,

<http://sg.news.yahoo.com/singapores-lee-says-not-blame-low-birth-rate-080202305.html>.

<sup>8</sup> The Social Development Unit (SDU), formed in 1984, promoted marriage among graduate singles while Social Development Services (SDS), set up in 1985, promoted marriage among non-graduate singles. Taken from About SDN, Social Development Network, accessed January 14, 2014, <http://app.sdn.sg/AboutSDN.aspx>.

<sup>9</sup> Fictitious organisation for the purpose of the case study

<sup>10</sup> Character's name, title, and assigned task are purely fictitious

Ministry's position on the matter. To ensure she was well prepared for the meeting, she turned on her computer and began researching the issue.

### **Singapore's Population Paradox**

Since the publication of the Population White Paper in January 2013, there had been renewed attention on Singapore's dismal total fertility rate (TFR). The Paper projected Singapore's total population could reach 6.5 - 6.9 million by 2030, with citizens making up just 3.5 – 3.8 million at the current TFR of 1.2 and an intake of 15,000 – 25,000 new citizens per year.<sup>11</sup> To address growing concerns over foreign competition for local jobs, overcrowding and congestion, the ability of a growing foreigner population to assimilate, and peace and security especially in light of recent incidents involving foreign workers, the government started to tighten immigration rules and moderate the inflow of foreign workers.

The Ministry of Family and Social Development had thus been tasked with fixing the other side of the population equation – promoting family formation and increasing the TFR. While the TFR had been increasing for the second consecutive year to 1.29 births per female in 2012, up from the all-time low of 1.15 births per female in 2010,<sup>12</sup> it was still well below the replacement rate of 2.10. There is a clear trend of women delaying childbearing. Fertility rates for resident females below 30 years fell significantly, while fertility rates of resident females above 30 increased slightly.<sup>13</sup>

Singapore's population is ageing rapidly. In 2012, there were 5.9 working-age citizens for each citizen aged 65 and above. By 2030, this ratio is estimated to fall to 2.1, at the current birth rate and no immigration.<sup>14</sup> Singapore is not alone in battling this issue; most of Europe and other East Asian countries facing a similar demographic predicament. However, the issue is much more pronounced in East Asian countries which saw fertility and mortality rates decline dramatically over a much shorter period than in Western countries.<sup>15,16</sup>

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<sup>11</sup> National Population and Talent Division (NPTD), "A Sustainable Population For A Dynamic Singapore", Population White Paper, January 2013, p27

<sup>12</sup> Singapore Department of Statistics, "Population Trends 2013", September 2013, [http://www.singstat.gov.sg/publications/publications\\_and\\_papers/population\\_and\\_population\\_structure/population2013.pdf](http://www.singstat.gov.sg/publications/publications_and_papers/population_and_population_structure/population2013.pdf).

<sup>13</sup> Refer to Exhibit 1 Age-Specific Fertility Rates in Singapore

<sup>14</sup> Refer to Exhibit 2 Singapore's Declining Old-Age Support Ratio

<sup>15</sup> Theresa Wong and Brenda S.A. Yeoh, "Fertility and the Family: An Overview of Pro-natalist Population Policies in Singapore", *Asian MetaCentre Research Paper Series No. 12 (Asian MetaCentre for Population and Sustainable Development Analysis)*, 2003, p4.

## Singapore's Pro-Natalist Policies

In response to a seemingly irreversible downward trend of the TFR triggered by the success of earlier anti-natalist policies, a new population policy was launched in March 1987, for which the primary slogan was 'Have Three Or More Children, If You Can Afford It'.<sup>17</sup> New initiatives covering numerous policy areas, including childcare, primary school registration, housing allocation, and taxation were introduced.<sup>18</sup> The launch of the new policy was accompanied by an extensive media campaign which hoped to influence the public of the advantages of having a family and more children.<sup>19</sup>

However, the TFR continued to fall from 1.96 in 1988 to 1.42 in 2001, so more specific measures such as the 'Children Development Co-Savings Scheme' (popularly referred to as, the 'Baby Bonus Scheme') and the 'Third Child Paid Maternity Leave Scheme' were introduced in 2000.<sup>20</sup> Despite the monetary benefits of the scheme,<sup>21</sup> the TFR continued to fall and it became apparent that a purely monetary approach was ineffective. The government then began to focus on promoting family-friendly workplaces. But by 2010, the TFR had sunk to an all-time low of 1.15.

In January 2013, the government announced enhancements in the following areas:

- a. Enabling couples to get housing faster and more easily;
- b. Providing more support for medical-related conception and delivery costs;
- c. Further defraying child-raising costs, including healthcare costs;
- d. Enhancing work-life measures to help working couples balance work and family commitments; and
- e. Signalling to fathers to play a bigger role through paternity and shared parental leave.<sup>22</sup>

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<sup>16</sup> Refer to Annex A; see Exhibit 3 Comparison of Total Fertility Rates between Western Countries and East Asia, 1950 – 2010 Exhibit 4 Total Fertility Rates, 2005

<sup>17</sup> Wong and Yeoh, "Fertility and the Family", p12.

<sup>18</sup> Ibid, p14.

<sup>19</sup> Ibid, p12.

<sup>20</sup> Ibid, p14.

<sup>21</sup> By 2002, S\$11 million had been disbursed under the Baby Bonus Scheme and another S\$9 million under the Third Child Paid Maternity Scheme. (Original source: *The Straits Times*, 6 April 2002. Taken from Wong and Yeoh, "Fertility and the Family", p15.)

<sup>22</sup> Grace Fu, "Sustaining a Strong Singaporean Core", *Speech by Ms Grace Fu, Minister in the Prime Minister's Office, Second Minister for the Environment and Water Resources and Second Minister for Foreign Affairs at the Parliamentary Debate on Population White Paper*, February 5, 2013, <http://population.sg/whitepaper/downloads/min-grace-fu-speech-parliamentary-debate.pdf>, (December 19, 2013)

However, it was not clear if these initiatives would be enough to stem the problem. The assumption of policy makers, not just in Singapore but across East Asia, had been that low fertility could be overcome by dealing with young people as selfish, cost-benefit calculating individuals, rather than through broad social reform.<sup>23</sup> Japan and Singapore had essentially been putting the blame on young people for the problem.<sup>24</sup>

But surveys of young people in all East Asian countries continued to show that they would prefer to have more children than they are actually having, strongly suggesting that the problem does not lie with the motivations of young people themselves but with the nature of the societies in which they live.<sup>25</sup> In fact, according to the 2012 Marriage and Parenthood Study in Singapore, 83% of singles intended to get married, and 84% of married persons intended to have two or more children.<sup>26</sup>

The reasons provided for delaying pregnancy, in a survey by the Bioethics Legal group for Reproductive Issues in Singapore (BELRIS), were not frivolous ones. The majority of respondents wanted to achieve financial and relationship stability before having children, while only a minority chose to delay having or not have children for either personal reasons<sup>27</sup> or complacency (belief that there will be no problem having children in the late 30s).<sup>28</sup>

While cash bonuses and subsidised healthcare and education offer temporary financial relief, aspiring parents also need to be confident that, if they have children, they would not be unduly penalised in financial or employment terms.<sup>29</sup> Because of cultural gender biases, this was an even greater concern for young women. Young women needed to believe they would be able to pursue their employment goals while still having the number of children they wished to have.<sup>30</sup> While the Singapore government had provided generous incentives for local companies to implement flexi-work arrangements, as well as government-paid maternity and paternity leave, the actual effectiveness of such schemes was doubtful. In a survey conducted by the Land Transport Authority in 2013, about half of the 100 organisations surveyed said they offered flexible-work options, but fewer than one in 10

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<sup>23</sup> Peter McDonald, "Very Low Fertility: Consequences, Causes and Policy Approaches," *The Japanese Journal of Population* Vol 6. No. 1, 2008, p22

<sup>24</sup> Ibid

<sup>25</sup> Ibid

<sup>26</sup> NPTD, Population White Paper, p20

<sup>27</sup> Refer to Exhibit 5 Ideal Age to Start Having Children

<sup>28</sup> Refer to Exhibit 6 Reasons for Delaying Pregnancy

<sup>29</sup> McDonald, "Very Low Fertility", p22

<sup>30</sup> Ibid

employees said they were aware of such schemes or were allowed access to them.<sup>31</sup> In an uncertain job environment, employees may also not want to take up such options for fear of sticking out.

### **An ART-istic Solution**

Assisted Reproduction Technology (ART) has been highlighted as a possible solution to enable Singaporeans to achieve their family aspirations. With people living longer and healthier, the concern that older parents will not live long enough to care for their children has subsided. In its latest slew of parenthood schemes announced in January 2013, the Singapore Government enhanced co-funding for ART treatments, covering up to 6 attempts. Indeed, the number of women opting for ART treatments in Singapore has been rising steadily,<sup>32</sup> with the number of babies born through ART from 2006 to 2009 increasing by as much as 65%.<sup>33</sup> However, the quantity and quality of eggs decline with age. A Scottish study found women lose 88% of their eggs by 30, and have only 3% left by 40.<sup>34</sup> As the body picks the best egg at each menstrual cycle, those that are left tend to be of poorer quality.<sup>35</sup> As a result, In-vitro fertilisation (IVF) success rates correspondingly decline with age. With Singaporeans delaying marriage and childbirth, the effectiveness of ART treatments are still limited by the biological clock.

### **Social Egg Freezing**

With advances in technology, social egg freezing is now a real possibility. In Singapore, freezing eggs for future use are only allowed for women who might lose their fertility through medical treatments such as chemotherapy. EOF, which allows a healthy woman to freeze her eggs at the peak of her fertility, is prohibited. Following an article in *The Straits Times* on social egg freezing in March 2012, the Ministry of Health said it would look into the guidelines. However, in November 2012, Minister of State Dr. Amy Khor responded on the matter citing medical concerns, social, and ethical implications for not allowing EOF.<sup>36</sup>

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<sup>31</sup> Jacqueline Woo, "Bosses, give flexi-work a shot", *MyPaper*, July 23, 2013,

<http://business.asiaone.com/news/bosses-give-flexi-work-shot> (December 19, 2013)

<sup>32</sup> Refer to Exhibit 7 Number of Women Opting for Assisted Reproduction Technology (ART) Treatments

<sup>33</sup> Refer to

Exhibit 8 Number of Babies Born to Mothers through ART Treatment

<sup>34</sup> Salma Khalik, "Freezing eggs could reverse falling birth rate," *The Straits Times: C1-2*, March 16, 2012.

<sup>35</sup> Ibid

<sup>36</sup> BELRIS, "Egg Freezing Survey," *BELRIS Newsletter*, January 2013, p2

Other countries have reacted to EOF in different ways. Canada, Australia, the Netherlands, and United Kingdom have put regulations in place to allow the process. In the UK, some clinics even offer schemes to store eggs for free if the woman agrees to donate some of her eggs<sup>37</sup>. Israel has officially recognised age-related fertility decline, and allowed EOF as a form of preventive medicine.<sup>38</sup> On the other hand, the United States, India, Malaysia, and Thailand have left the sector unregulated. Singapore and Switzerland only permit egg freezing on medical grounds.

### *The Female Choice Argument*

Can women now have it all? With EOF, women may no longer be faced with the unenviable choice of putting career first or starting a family. This is another step towards reproductive autonomy for women. With more personal choice, we may finally see more women in leadership positions and reduce the gap with men. Women who delay childbirth may enjoy higher earnings and better career success, which give them better capacity to pay for childcare, allow them to remain in full or part-time employment, and improve their opportunities to return to the workforce. This would address one of the key reasons women are hesitating to have more children. 81% out of 410 respondents in the Clearstate survey support single women being given the option to undergo EOF in Singapore.<sup>39</sup> The advocates of EOF argue it is the personal right of women to choose to undergo the procedure, and the government has unfairly restricted personal freedoms.

### *The Fertility Argument*

Many single women argue that they remain single not by choice and EOF will serve as an ‘insurance’ to help them conceive later when they find the right partner. However, critics argue that this might give a false sense of security and encourage them to delay marriage and parenthood. If permitted, this could even undermine efforts to address other workplace barriers to parenthood.

### *The Scientific or Medical Argument*

EOF will improve ART outcomes. The safety and efficacy of freezing relatively ‘young’ eggs is generally supported by research.<sup>40</sup> However, any future health implications for the woman

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<sup>37</sup> Benjamin Capps, Diana Yun-Hsien Lin, and Teck Chuan Voo, “An Ethical Analysis Of Human Elective Egg Freezing”, *Centre for Biomedical Ethics National University of Singapore*, July 8, 2013, p49

<sup>38</sup> *Ibid*, p50

<sup>39</sup> Clearstate, "Survey Conducted to Evaluate the Position on Elective Oocyte Freezing in Singapore", *Economic Intelligence Unit*, April 9, 2013, p20

<sup>40</sup> Capps, Lin and Voo, “An Ethical Analysis”, p9

and resulting child is yet unknown. The process of harvesting the eggs does carry risks. The government needs to weigh carefully whether a perfectly healthy woman should be allowed to be subject to such medical risks. Due to insufficient data and research on this new technology, EOF may give women a false sense of security when making the decision to delay pregnancy. While the age of the eggs are important, there are also other health risks to childbearing at a mature age.

#### *The Morality or Family Argument*

Certain religious groups are strongly opposed to EOF and other forms of artificial reproductive technologies.<sup>41</sup> Others also worry that EOF would erode Asian family values. Yet others strongly believe that we should not encourage a delay in childbearing. In the Clearstate survey,<sup>42</sup> 48% indicated that ethical, religious or moral issues could be a potential implication arising from EOF. 60% believed EOF would have a social impact of Singaporeans getting married later.

#### *The Equity Argument*

EOF is likely to benefit most working women with good career prospects. Especially if the procedure is to be privately funded, this will offer higher income women an opportunity to advance their career further before having children. On the other hand, women who cannot afford the procedure will continue to suffer trade-offs between career and family. In response to the debate on social egg freezing, women's rights activist group Association of Women for Action and Research (AWARE) commented on their website:

*Reproductive technologies tend to have class biases. We should ensure that our policies do not encourage and enable only a narrow category of women to reproduce, and thereby deepen inequalities among women.*<sup>43</sup>

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<sup>41</sup> Refer to Exhibit 10 Letter to Pastors from the National Council of Churches of Singapore

<sup>42</sup> Refer to Exhibit 9 Belief regarding implications of EOF on Society (n=410)

<sup>43</sup> Kanwaljit Soin and Vivienne Wee, "Proceed with caution on social egg freezing", *Association of Women for Action and Research*, November 21, 2012, <http://www.aware.org.sg/2012/11/proceed-with-caution-on-social-egg-freezing/#sthash.uN7xecuQ.dpuf>



## Snippets of Transcript of Meeting with ASWP<sup>44</sup>

During the meeting with ASWP, Sandra was provided with a list of petitions to allow the EOF procedure. Among the petitioners, some noteworthy case studies include:

S/N	Description
1	Jenny, 37, wants to buy time for her biological clock after a stable relationship went south recently. She wants to freeze her eggs so that she may still have children when she finds her life partner. <sup>45</sup>
2	Amy, 30, recently married. She is currently pursuing further studies while her husband is seeking a career switch. Amy feels pressured to start a family but is worried their financial situation will not stabilise until after a few years. She thinks EOF will give her time to prepare for parenthood while not having her pregnancy chances lowered with age. <sup>46</sup>
3	Connie, 28, and her husband plan to seek EOF treatment overseas if regulations in Singapore do not change. Connie's husband has just been posted overseas for the next 5 years while Connie's business in Singapore is just taking off.
4	Jessica, 34, is a childless divorcee. She hopes it will not be too late for her to have children if she finds a new husband. She believes EOF would grant her the time she needs to find the right partner this time.
5	Vida, 33, is single but hopes to have a family of her own someday. She actively tries to meet new people but still has not found Mr. Right. She thinks EOF would be great for women like her as a form of 'insurance'.

## Framing the Response

Sandra realised she would need to consider the various stakeholder perspectives. Particular to this context, she was aware of the shifting government-citizen dynamic in Singapore. The Singapore government now had to deal with increasingly vocal and varied advocacy groups. Addressing a paradigm shift in public service delivery from customer-centric to community partnerships, the government had to balance the interests of narrow interest groups and the wider population. Recent examples of interest group lobbying included Save Bukit Brown

<sup>44</sup> Fictional conversation

<sup>45</sup> Ng Wan Ching, "Freezing the Egg to Delay Motherhood", *Mind Your Body*, *The Straits Times*, April 12, 2012, <http://www.healthxchange.com.sg/News/Pages/freezing-egg-delay-motherhood.aspx>

<sup>46</sup> Fictional story based on "Should single women be allowed to freeze their eggs?", *The Asian Parent Singapore Edition*, May 30, 2013, <http://sg.theasianparent.com/social-egg-freezing-in-singapore-human-egg-banks/#ixzz2o0dQturl>

Cemetery, where civil society organisations protested against a plan to construct a road through the old Cemetery, and Pink Dot SG, an annual movement in support of the Lesbian, Gay, Bisexual, and Transgender community in Singapore. How should the government engage with such groups? How would you balance the interests of a small group versus the possibly silent majority? How should the policy response be framed and decision making process be conducted in order to improve public acceptance?

## Pink vs Brown: How advocacy groups frame the issue

### *Pink Dot Sg*

Started in 2009, Pink Dot Sg is an annual, non-profit movement in support of the Lesbian, Gay, Bisexual and Transgender (LGBT) community in Singapore.<sup>47</sup>

It has grown from an initial attendance of 1,000 in 2009 to 21,000 supporters in 2013. It has even secured corporate sponsors including Barclays, Google, J.P. Morgan and Parkroyal on Pickering.<sup>48</sup>

How did a campaign for a specific interest group like the LGBT community gain such widespread public support?

It was able to make the matter relatable by framing the movement as a fight for the “Freedom to Love” and acceptance.

It also tied the issue to national themes. As quoted from their website<sup>49</sup>:

*“Pink Dot recognises that many Singaporeans are conservative. However, we also recognize the dangers that prejudice and bigotry can have on our social fabric. We are mindful that in some countries, hate crimes towards the sexual minorities have spurred outcries and social unrest.”*

*“Pink is the colour of our ICs. It is also the colour when you mix red and white – the colours of our national flag. Pink Dot stands for an open, inclusive society within our Red Dot, where sexual orientation represents a feature, not a barrier.”*

By opting for a more positive tone that spoke about inclusivity and anti-discrimination, the movement was better able to achieve buy-in as it was not seen as antagonistic to the government or the “conservative majority”.

<sup>47</sup> Wikipedia, “Pink Dot SG”, [http://en.wikipedia.org/wiki/Pink\\_Dot\\_SG](http://en.wikipedia.org/wiki/Pink_Dot_SG) (accessed March 17, 2014)

<sup>48</sup> Pink Dot SG website, <http://pinkdot.sg/> (accessed March 17, 2014)

<sup>49</sup> Ibid

### *Save Bukit Brown Cemetery*

This movement arose when the Land Transport Authority (LTA) announced plans to build an eight-lane highway that would cut through the middle of the Bukit Brown Cemetery. Nature lovers and heritage enthusiasts claim the highway would destroy the ecology and wildlife of the area as well as demolish historical tombs which date as far back as the 1830s.<sup>50</sup> Bukit Brown Cemetery was even named as an at risk site on the 2014 World Monuments Watch, the first Singaporean site to be listed.<sup>51</sup> There was an energetic campaign over the internet to educate Singaporeans and obtain 100,000<sup>52</sup> names for a petition to the government. However, fewer than 2,000 people had signed the petition.<sup>53</sup>

However, the disappointing number of petitioners and limited number of interest groups campaigning for the preservation of Bukit Brown are a poor reflection of the views of the silent majority. An Institute of Policy Studies survey on the Our Singapore Conversations found that 60% of 4,000 respondents preferred the preservation of green spaces over infrastructural development.<sup>54</sup>

Finally, the Government announced that a third of the controversial new road will be an elevated vehicular bridge. It is expected to cost three times more, but will be less environmentally damaging and result in fewer graves being exhumed. The authorities have also commissioned the documentation of the affected graves, the first time the government is funding such documentation.<sup>55</sup>

Still, civic groups were disappointed at the lack of engagement with officials despite 6

<sup>50</sup> The Economist, "Matters of grave concern", *Singapore's Heritage, Banyan Asia, The Economist blog*, March, 16, 2012, <http://www.economist.com/blogs/banyan/2012/03/singapores-heritage>

<sup>51</sup> Melody Zaccheus, "Bukit Brown Cemetery named on global list as a site at risk", *The Straits Times*, October 9, 2013, <http://www.straitstimes.com/the-big-story/singapore-heritage/story/bukit-brown-cemetery-named-global-list-site-risk-20131009>

<sup>52</sup> SOS Bukit Brown, "About Us", <http://sosbukitbrown.wordpress.com/about-us/> (accessed March 18, 2014)

<sup>53</sup> The Economist, "Brown study", The Economist website, March 17, 2012, <http://www.economist.com/node/21550321>

<sup>54</sup> Neo Chai Chin, "What's Green Space?", Today Online, December 1, 2013, <http://www.todayonline.com/singapore/whats-green-space>

<sup>55</sup> Joanne Chan, "LTA announces finalised alignment for Bukit Brown road project", Channel News Asia, March 19, 2012

months of consultation. The Ministry had responded that it was “not consulting” on whether to build the road “from the onset”.<sup>56</sup> This created cynicism over the authorities’ sincerity during the consultation process.

Prime Minister Hsien Loong recognised the evolving social compact between the government and an increasingly vocal electorate, admitting that Singaporeans are now “much more educated and vocal” and “organise together more easily”.<sup>57</sup> He has called for more engagement since Singapore’s last general election in May 2011, when the ruling party saw the lowest share of overall votes since independence.<sup>58</sup> However, finding the right balance continues to be a challenge.

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<sup>56</sup> Rebecca Lim, “Singapore to drive road through historic cemetery”, *BBC News Asia*, April 6, 2012, <http://www.bbc.com/news/world-asia-17594008>

<sup>57</sup> Ibid

<sup>58</sup> Ibid

## **Policy Options**

Returning from the meeting with ASWP, Sandra thought about the report she had to write.

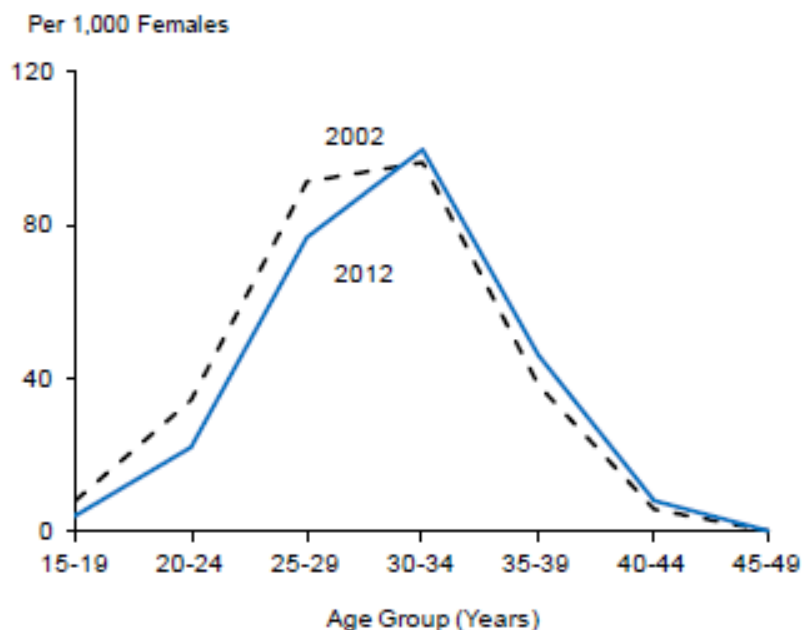
Among policy options she considered were:

- a. Continue to permit oocyte freezing only on medical grounds, maintaining the ban on social egg freezing;
- b. Lift the ban but leave the procedure unregulated;
- c. Introduce guidelines to regulate EOF without government subsidies or incentives; and
- d. Subsidise EOF procedures at a modest level

Given all other measures to boost fertility have failed and the political sensitivities over liberal foreign worker and immigration policies, what should Sandra's recommendation on EOF to the Minister be? Consider the impacts on achieving policy objectives, enhancing personal choice, influencing social norms and behaviours and managing public safety concerns.

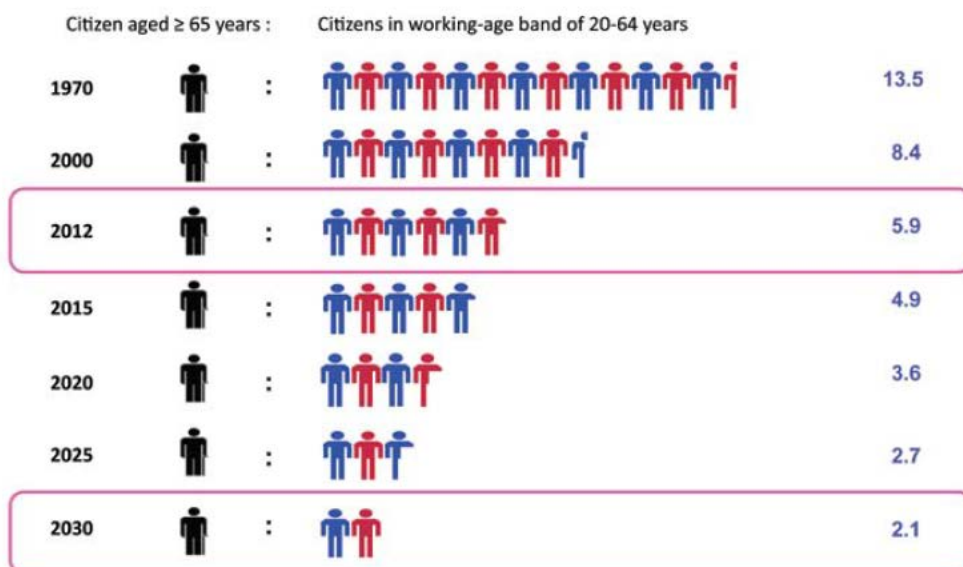
## Annex A

Exhibit 1 Age-Specific Fertility Rates in Singapore



Source: Singapore Department of Statistics, *Population Trends 2013*, p23

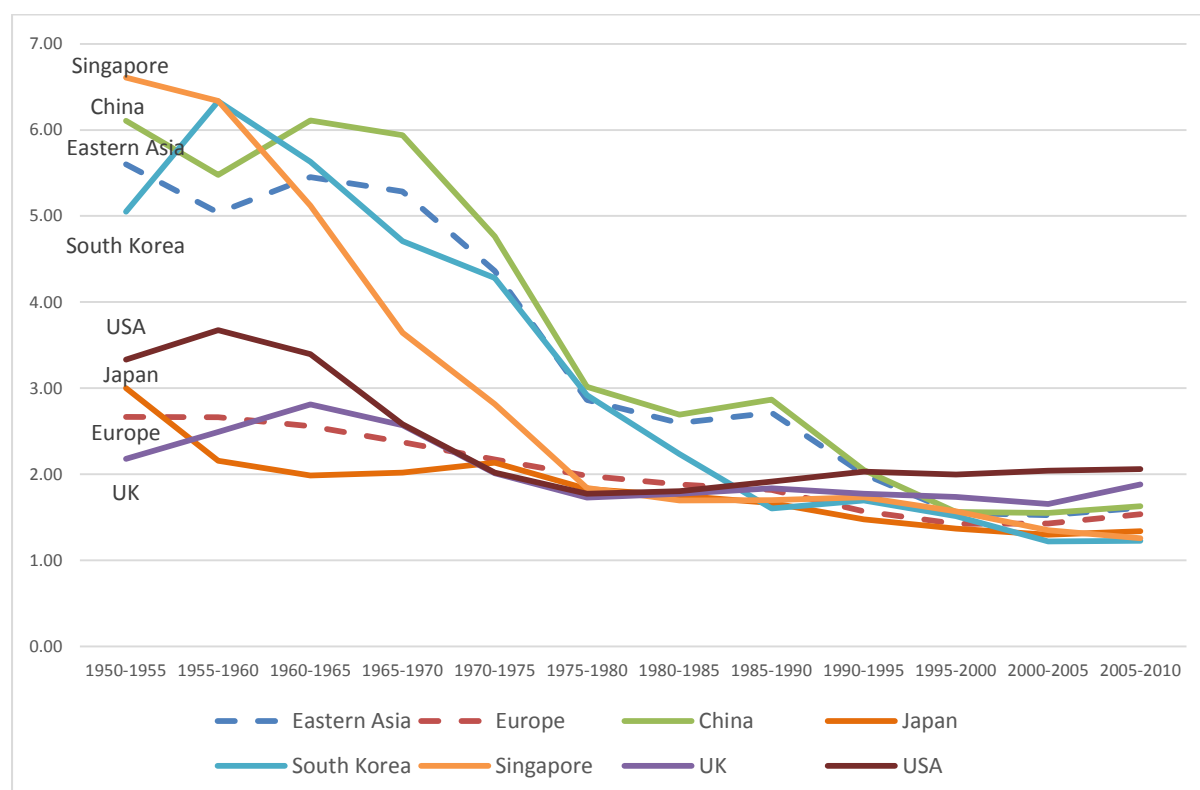
Exhibit 2 Singapore's Declining Old-Age Support Ratio



Assuming current birth rates and no immigration from 2013 onwards

Source: Singapore Department of Statistics. Taken from the NPTD, Population White Paper Chart 1.5, p13

*Exhibit 3 Comparison of Total Fertility Rates between Western Countries and East Asia, 1950 – 2010*



Source: UN Data, Statistics, data.un.org

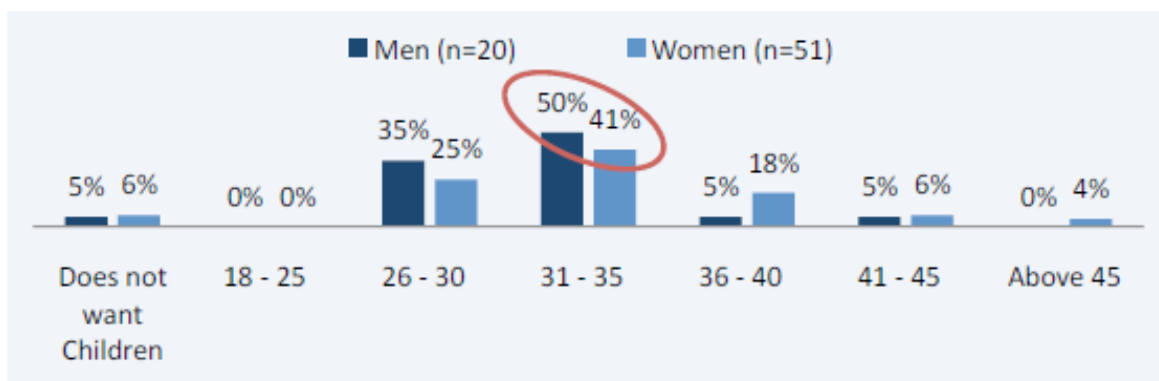
*Exhibit 4 Total Fertility Rates, 2005*

Group 1 Countries	TFR	Group 2 Countries	TFR
United States	2.05	Switzerland	1.42
Iceland	2.05	Austria	1.41
New Zealand	2.00	Portugal	1.40
France	1.94	Malta	1.37
Ireland	1.88	Germany	1.34
Norway	1.84	Italy	1.34
Australia	1.82	Spain	1.34
Finland	1.80	Greece	1.28
Denmark	1.80	Japan	1.26
United Kingdom	1.80	Singapore	1.24
Sweden	1.77	Taiwan	1.12
Netherlands	1.73	Republic of Korea	1.08
Belgium	1.72	Hong Kong SAR	0.97
Luxembourg	1.70	Shanghai City	0.60
Canada	1.60		

Original Source: Eurostat and national statistical offices. Taken from Peter McDonald, "Very Low Fertility", 2008, p21



*Exhibit 5 Ideal Age to Start Having Children*



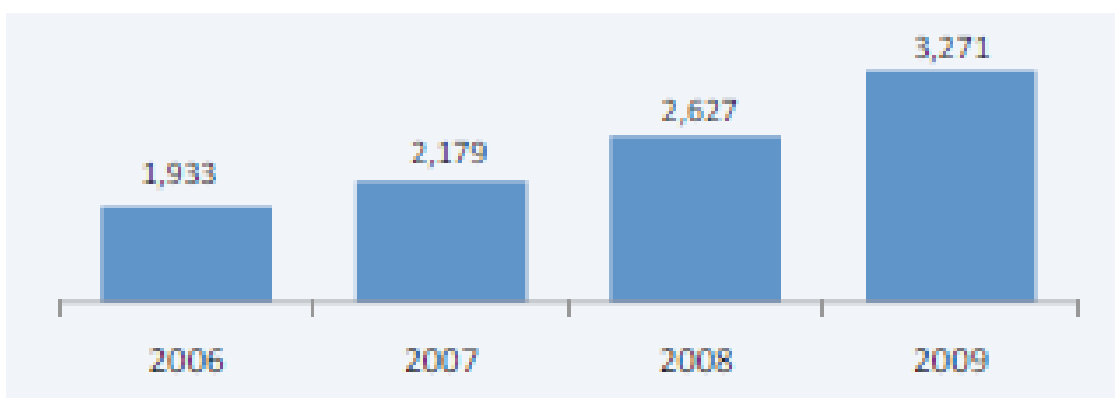
Source: BELRIS quantitative survey. Taken from Clearstate, "Survey on Elective Oocyte Freezing", p12

*Exhibit 6 Reasons for Delaying Pregnancy*

Reasons for Delaying Pregnancy	Total (n=202)	Men (n=52)	Women (n=150)
Job/Financial security	78%	88%	74%
Relationship stability	62%	54%	65%
Belief that there will be no problem having children in the late 30s	34%	38%	33%

Source: BELRIS quantitative survey. Taken from Clearstate, "Survey on Elective Oocyte Freezing", p12

*Exhibit 7 Number of Women Opting for Assisted Reproduction Technology (ART) Treatments*



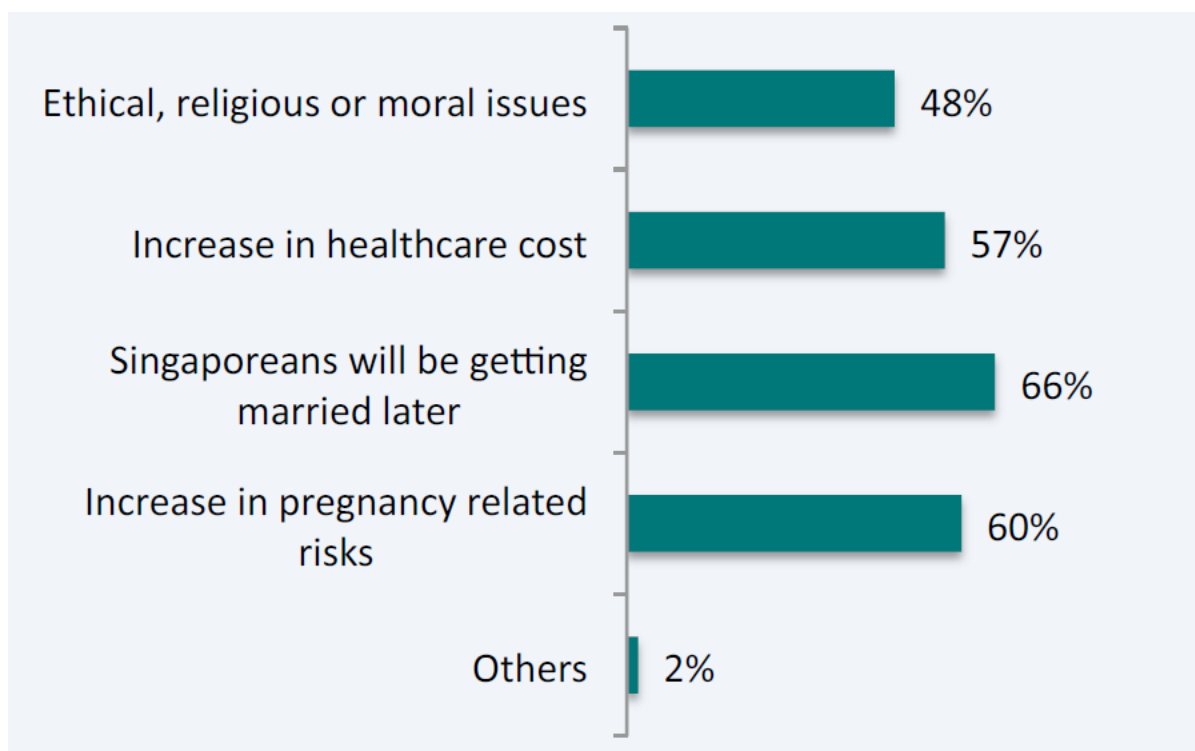
Original Source: The Straits Times (Data from Singapore Ministry of Health). Taken from Clearstate, "Survey on Elective Oocyte Freezing", p15

*Exhibit 8 Number of Babies Born to Mothers through ART Treatment*

Year	Total Number of Babies
2006	717
2007	804
2008	927
2009	1,158

Original Source: The Straits Times (Data from Singapore Ministry of Health). Taken from Clearstate, "Survey on Elective Oocyte Freezing", p15

*Exhibit 9 Belief regarding implications of EOF on Society (n=410)*



Source: Clearstate, "Survey on Elective Oocyte Freezing", p21

*Exhibit 10 Letter to Pastors from the National Council of Churches of Singapore*



**Social Egg Freezing**

**10 January 2013**

Dear Pastors

As you know, the policy on human egg freezing is being reviewed by the Ministry of Health. Currently, only women who have to undergo treatments that may damage fertility---like chemotherapy and radiotherapy---are allowed to freeze their eggs.

The policy review has been prompted by an increase in the number of professional career women seeking to freeze their eggs for future pregnancies.

What should be the Christian position with regard to egg freezing? The view of the National Council of Churches of Singapore is that women should only be allowed to freeze their eggs if there is a medical reason for doing so. We consider the existing policy adequate.

The Council however would like to caution against relaxing the legislation to permit egg freezing for 'lifestyle' reasons, or as a matter of preference. Our concern is that egg freezing is not without health risks to both the woman and the child who is later born.

The Council would like to commend the attached paper by Dr Roland Chia for your careful study.

We appreciate your feedback and comments. Please use the **Contact Form** at the [Contact Us](#) page.

for National Council of Churches of Singapore

Lim K Tham General Secretary

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**Social Egg Freezing: Ethical and Social Considerations**

Mature oocyte cryopreservation or vitrification (egg freezing) is a new technique of preserving the reproductive potential of women that has been developing over the last decade. It is employed especially in countries that prohibit the cryopreservation of human embryos due to ethical objections. Although the American Society for Reproductive Medicine has recently lifted the experimental label from the procedure because of improving rates of successful pregnancies, the technology is still at its infancy.

In many countries, including Singapore, mature egg freezing and banking is generally regarded as a viable way of preserving the fertility of women undergoing cancer treatment, although data on pregnancy and live births from this technique in such patients is limited. Egg banking is also a feasible strategy for fertility preservation in patients with certain genetic conditions associated with a high risk of ovarian cancer, such as BRCA mutations. The National Council of Churches supports the medical application of egg freezing technology in these exceptional and rare cases as long as stringent protocols and guidelines are observed. It is therefore in broad agreement with the current policy of the Ministry of Health (MOH) of Singapore that this technique should be used for medical reasons only.

In recent years, however, there has been a growing interest in the use of this technology for 'lifestyle' reasons, especially in women who wish to delay childbearing until they are older. Social or elective egg freezing has therefore become an attractive option, for example, for women who wish to advance their careers before starting a family. Countries with low total fertility rate (TFR) are also interested in the non-medical use of this technology because of its perceived potential for increasing birth rates. Egalitarians have argued that this technology would allow women to overcome the biological 'discrimination' associated with age-related decrease in fertility and achieve equal status with men. Some have argued that elective egg freezing is analogous to a contraceptive pill as both can effectuate delayed reproduction.

While the Council appreciates the tensions that contemporary women face between pursuing a career and having a child, it does not support social egg freezing because of the profound ethical and social concerns associated with it. The fundamental problem with social egg freezing is that this technology is used for non-medical reasons. The technology is not used to treat a pathology or prevent an illness but rather to facilitate and consequently promote a lifestyle option or preference. Social egg freezing is not fertility treatment because the women who use this technology are healthy. We must for this reason proceed with extreme caution because performing medical procedures on healthy people is an ethically questionable practice. This applies to certain forms of aesthetic surgeries and (with rare exceptions) also to abortion.

The current hype surrounding social egg freezing may give women the wrong impression that this technique is a kind of panacea that guarantees them the opportunity to have a family later in life. The chance of having a baby with this technique is grossly overestimated. In reality the probability of a live birth from a frozen egg is currently less than 6% per egg. Older women who choose to have their eggs frozen for future use have an even slimmer chance of having a child. This is not only because older eggs are more likely to have flaws that impede their development into babies, they also do not grow and implant as well as younger eggs. Regarding egg freezing as 'fertility insurance' therefore creates false hope.

The procedure for procuring eggs for cryopreservation or freezing also poses some health concerns that should not be dismissed lightly. The large amounts of fertility medications needed to procure sufficient amount of eggs for freezing and subsequent *in vitro* may result in Ovarian Hyperstimulation

Syndrome (OHSS), which, in severe cases, may cause kidney failure, blood clots, electrolyte imbalance and even death. The process of freezing, storage and thawing can leave some eggs damaged and hence useless. When the woman returns to collect her eggs for IVF, there is a chance that some of the eggs may not survive and she may not achieve a healthy pregnancy. Older women are generally more vulnerable to IVF related risks and complications in pregnancy. This is compounded by the fact that older women are more likely to have acquired chronic illnesses like diabetes or hypertension. The risks to the health of both mother and child should never be underestimated. The pressing ethical issue here is that, in the case of social egg freezing, healthy women have opted to take these unnecessary risks for the sake of lifestyle preferences.

The promotion of elective egg freezing has broader social ramifications and consequences. Like other forms of Assisted Reproductive Technology (ART), this technique furthers the medicalisation and commercialisation of women's bodies. That women voluntarily elect to take advantage of this technology does not prevent this subtle but serious shift in public perceptions and sensibilities. Egg freezing also encourages what some commentators have called an on ongoing consumerist imperialism in medicine in general and the non-medical use of medical technologies in particular. Resources, talents and energies are increasingly diverted away from the strictly 'medical' to the 'consumerist'. The business side of social egg freezing, which involves fertility clinics and other related medical and non-medical enterprises must also be taken into consideration when evaluating current interest in the method.

Underlying the often heady rhetoric that champions the autonomy and rights of the contemporary woman, some commentators have rightly discerned elective egg freezing to be in essence a profoundly selfish act because it sees career as more important than the interests and welfare of the child. Children must be given the healthiest and best start in life. This surely includes parents who are young and energetic enough to nurture them. In many ways this is more important than financial stability, an argument often used to support egg freezing and deferred motherhood. In addition, women in their 40s and even 50s who use this technique often place on their children the heavy burden of having to take care of their geriatric parents (often burdened with chronic health conditions) when they are just about to start out in life as working adults, amidst all the attendant responsibilities and challenges associated with people at this stage of life (marriage, career, mortgage, starting a family, etc).

From the standpoint of the health of the mother and the welfare of the child, the undisputed fact is that the best age for a woman to have a child is in the mid-twenties. As a nation, we should try to put in place the best policies and introduce reasonable changes in the workplace that would encourage and support childbearing at this ideal stage in the life of the woman. But, as countries like France and Norway have shown, this trend has to do with more than broad policies and workplace practices. It has to do fundamentally with changing mindsets and views about marriage and family. It is therefore of paramount importance that we should, as a society, address the mindsets that promote self-interest and distort priorities. Allowing elective egg freezing will be perceived as signalling our acquiescence of the very trends that should be subjected to serious critique, resisted and challenged.

Prepared by Dr Roland Chia (25 November 2012).

Source: National Council of Churches of Singapore, “Social Egg Freezing”, January 10, 2013, <http://info.nccs.org.sg/joom837/index.php/m-current-issues> (December 19, 2013)