Like high cholesterol, population decline is a problem, but not in the way you might think . . .

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Abstract

The prospect of population decline in Europe is commonly understood to be an important policy problem. Discussions and research typically focus on the level and the trend of demographic indicators. Can policies be designed which, by targeting the constrained optimisation of rational individuals, cause the indicators to change in the right direction? In this intervention, I argue that like a surrogate marker in medicine, a demographic indicator is not a meaningful endpoint: something that is a direct measure of health or, analogously, a healthy society. Treating population indicators as meaningful endpoints can, as history has shown, lead to great harm. In my view, it is this misconception that makes population decline a truly serious and terrifying problem. So yes, population decline is a problem, but not in the way you, or the people who pose this sort of question, might think.

Keywords: population decline; fertility; institutions; surrogate marker

A few years ago, I was invited to participate in a plenary debate at the IUSSP conference in Cape Town. Specifically, I was asked to respond to the question: "Is very low fertility good or bad for the family, gender and society?" Because very low fertility is the main driver of population decline, my assessment of very low fertility as 'good' or 'bad' relates directly to whether I understand population decline to be a direct indicator of a problem. At first, I thought it would be fairly straightforward to make the case for the 'bad' position. But the more I thought about the question, the more I realised that I needed to think critically about what 'very low fertility' actually means. As Neyer (2011, p. 227) reminds us, "demographic measures are subject to interpretation and are not immutable facts of reality . . . it is demographers, politicians, the media, or other groups of people or public institutions who produce the perception that fertility levels are too 'low' or too 'high' or 'normal'. Likewise,

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it is they who construct the social, economic, and political consequences of fertility levels by transforming demographic measures into ostensibly negative outcomes for the future". I eventually concluded that it was important to be careful to distinguish between cause and consequence.

As has been demonstrated in previous research (see, for example, the contributions in Rindfuss and Choe, 2016), very low fertility, and, relatedly, population decline, is often the consequence of institutional rigidities in the face of change. When other things that remained or had become incompatible with having children could not be (successfully) altered, it was childbearing behaviour that (eventually) had to adapt. For example, in South Korea and Japan, where the institution of heterosexual marriage has been slow to change and where non-marital childbearing remains stigmatised, women have retreated from or postponed traditional marriage, as evidenced by the growing popularity of 'single weddings' for people who want the portrait and the party but not the husband (Newman, 2019; Qian, 2019). Population decline can be understood as one of many consequences of rigidities in gendered institutions in those countries. The issue, as I understand it, is whether there are specific negative consequences that I can attribute to population decline itself. How does one approach this question?

As I sought to clarify my understanding of the issue, I got some inspiration from a trip to the grocery store. Walking through the aisles, I was struck by the number of products that promise to reduce cholesterol levels. The marketing success of these products relies on an important error in thinking. If your doctor tells you that your cholesterol is high, we know it is something to worry about, so a product that can reduce cholesterol must make us healthier, right? Well, not exactly.... High cholesterol is a *surrogate marker*, "a laboratory measurement... that is used... as a substitute for a clinically meaningful end point... and that is expected to predict the effect of therapy" (Temple, 1999, p. 790). Low-density lipoprotein (LDL) cholesterol is not a direct measure of heart disease, but an easy-to-measure laboratory value, an indicator of poor health behaviour and a predictor of an eventual bad outcome.

When surrogate markers are validated for a particular therapy, they are meaningful. But there is no evidence that reducing your cholesterol by drinking cholesterol-reducing drinks will reduce your risk of a heart attack. While misplaced efforts to 'treat' the surrogate might be a waste of money, in some instances, they can also be harmful. A drug called Torcetrapib substantially reduces LDL cholesterol levels in patients, but it also increases the risk of death and cardiovascular morbidity (Barter et al., 2007). In the world of medicine, Kirsch (2010) cautions that: "Surrogates often take on a life of their own, far removed from the actual disease they represent." We shouldn't care if 'surrogates' are improving, but should instead look for evidence of whether and when "surrogate improvement means better health". Like high cholesterol, I think that very low fertility is often an indicator that something is unhealthy or 'bad' in society. I can see population decline resulting in harm when the fertility trends that lead to population decline are treated as a policy target; i.e., when, like high cholesterol, they are 'treated' as a meaningful endpoint.

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To treat population decline or very low fertility as a meaningful endpoint is to assume that achieving a reversal by almost any means is a good outcome, and that the treatment (policies) that achieved such a reversal can be interpreted as a success. This thinking can be used to motivate and justify policy interventions which prioritise particular population outcomes at the expense of individual rights or individual well-being. Just as lowering LDL cholesterol with Torcetrapib can result in poorer health, targeting population decline might do more harm than good. Think, for example, of some of the efforts to respond to the 'threat' of global population growth that unabashedly dismiss or minimise the well-being of the people whose fertility needed to be 'controlled' (Connelly, 2008), or of the infamously coercive pronatalist regimes that we saw in Romania only a few decades ago (Kligman, 1998). While I don't think many people would advocate these kinds of overtly coercive policies, a more passive disregard for individual well-being is not uncommon, especially when countries are first confronted with the 'crisis' of low fertility. For example, Mishtal (2012) describes how policymakers in Poland restricted access to birth control and sex education in the years after fertility fell to very low levels. Increasing fertility by making it more likely that people would be unsuccessful in averting the births of children they didn't feel ready to have or were unable to afford, even as economic insecurity and inequality were growing and (previously generous) support for families was being cut, is not something I would interpret as a success. Similarly, while restricting the emigration of working-age adults, a significant source of population decline in some countries of eastern Europe. 1 might restrain population decline and population ageing, I am not at all sure that this change would imply a healthier society.

When the emphasis lies on changing the behaviour of people (quickly), without much reflection or concern about whether the effect of the intervention is beneficial to the people whose behaviour is being targeted, the damage can be difficult to reverse. Efforts to justify the manipulation of fertility behaviour through policy often target women, depicting them in not very flattering ways: women are irrational or ignorant, and their behaviour is pathological or dangerous. The result may be the development of mistrust in the government by people who feel angry and scapegoated by its narratives. As research carried out by my former PhD student Joanne Marczak suggests, once trust in policymakers has been eroded, it may be difficult to win back, even if the problem representation (low fertility is the fault of stupid and/or selfish women), and the associated policy strategy, change (Marczak et al., 2018).

When we, as experts, seek to explain and reverse population decline, we may shape the way that policymakers and citizens subsequently think and behave (Sigle, 2021). I worry that our research methods can reinforce the impression that broad institutional change is not an option. To identify the ever-elusive causal effects of policy on fertility, our statistical models of childbearing, and the proposed levers we often test, typically hold constant the wider institutional constellation of policies

¹ Thanks to Tomas Sobotka for reminding me of this fact.

in an effort to approach quasi-experimental comparisons. Such conceptualisations implicitly legitimise a focus on 'silver bullet' interventions, even as our cross-national comparative research documents just how different conditions are elsewhere (Sigle, 2016, 2021). As impressed as I am with the success of the 'use it or lose it daddy leave' in the countries that developed this intervention, I am not convinced that importing this 'best practice' would have much impact in the Polish context as described in Mishtal's study (2012), in which women reported being asked during job interviews to take pregnancy tests and to sign agreements not to get pregnant for two to three years after starting employment. Indeed, recent research by my PhD student Zuzana Dancikova showed that in Slovakia, there was a very delayed, and then rather unintended response to the introduction of one of the world's most generous parental leave policies for fathers. As Chanfreau (2022) has recently demonstrated in an historical analysis of the UK, the wider gendered and classed context reflected in and reproduced by previous policies cannot be ignored.

When we use micro-economic models of rational decision-making (childbearing decisions are the outcome of a cost-benefit analysis), we depict a world of constrained optimisation, in which bearing and raising children is always and inevitably going to be costly and disruptive for women and employers (see, for example, Gustafsson, 2001). Taking the constraints of the economy and labour market as more or less given, good parents and good employees are expected to 'choose' the right time to have children, and to bear the costs of any poor choices. Against a backdrop of rising inequality and economic insecurity, our expert discourses construct a highstakes game in which the victory condition (stable employment and some level of economic security) is compromised by childbearing, and preparing children for their own high-stakes competition in the future requires high levels of investment in their quality. Eventually, as Mishtal argues happened in Poland, very strategic thinking about the timing of family events and having only one child becomes a marker of responsible parenthood and middle-class status. Rather than challenge the child-unfriendly environment, the only option is to (continue to) adapt to it. And, as higher status women make these adaptations and justify their behaviour as rational and universally optimal, their adaptations may well be taken up more widely. When we see family and childbearing behaviour as part of a competitive strategy, with the risks of getting it wrong attributed to the bad decisions of individuals, I worry that a sense of social solidarity and a sense of collective responsibility for children will be eroded: your children; your (good or bad) decision; your responsibility. Policies that are framed as an attempt to expand choice sets by targeting the costs of childbearing discursively reinforce this individualistic cost-benefit framework, and make it more likely that people will internalise this way of thinking.

Similar to the way the Varieties of Capitalism (VOC) model is used to explain discrimination against women workers in Coordinated Market Economies (CMEs) as rational and profit-maximising (Rubery, 2009), the rational actor logic and framework vindicates employers who avoid hiring or retaining employees with care responsibilities. The marketing campaigns of egg freezing services and the statements of global corporations that subsidise their costs suggest that the optimal

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strategy for 'smart women' and 'good employees' is to freeze your eggs and displace your reproduction to a more economically unproductive stage of the life course (Browne, 2018). A society in which caring and family responsibilities are viewed as so inconvenient and incompatible with the labour market is not really one that gets my vote, regardless of its population indicators.

To summarise my argument, it is not sufficient to interpret population decline as a problem. It is necessary to understand how and why it is a problem. In my view, the very low fertility and high rates of emigration that lead to population decline are consequences of institutional rigidities that merit attention. Population indicators represent consequences, the causes of which are obscured as the wider context is held constant. Furthermore, while population decline can have additional detrimental consequences, this is often because it is understood and targeted as the problem. When population decline is treated as a meaningful endpoint, something that needs to be changed by whatever means necessary (coercion, egg freezing, etc.), we lose sight of what the meaningful endpoint should be: the kind of society that we want to live in. Although I expect that improvements in people's economic security and time demands would very likely be reflected in people investing more in family life and being less likely to emigrate, population growth or decline is not itself a meaningful endpoint. When the circumstances that led to population decline are left unaltered, made more invisible or taken for granted, the negative consequences of the institutional rigidities that resulted in very low fertility in the first place will persist, and have the potential to do more and lasting harm.

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References

Barter, P. J., Caulfield, M., Eriksson, M., Grundy, S. M., Kastelein, J. J. P., Komajda, M., Lopez-Sendon, J., Mosca, L., Tardif, J.-C., Waters, D. D., Shear, C. L., Revkin, J. H., Buhr, K. A., Fisher, M. R., Tall, A. R., Brewer, B., and the ILLUMINATE investigators (2007). Effects of torcetrapib in patients at high risk for coronary events. *New England Journal of Medicine*, 357, 2109–2122. https://doi.org/10.1056/NEJMoa0706628

Browne, J. (2018). Technology, fertility and public policy: A structural perspective on human egg freezing and gender equality. *Social Politics*, 25(2), 149–168. https://doi.org/10.1093/sp/jxx022

Chanfreau, J. (2022). The persistence in gendering: Work-family policy in Britain since Beveridge. *Journal of Social Policy*, 1–18. https://doi.org/10.1017/S0047279422000125 Connelly, M. (2008). *Fatal misconception: the struggle to control world population*. The

Connelly, M. (2008). Fatal misconception: the struggle to control world population. The Belknap Press of Harvard University Press.

- Gustafsson, S. (2001). Optimal age at motherhood. Theoretical and empirical considerations on postponement of maternity in Europe. *Journal of Population Economics*, 14(2), 225–247.
- Kirsch, M. (2010). Evidence-based medicine: Beware the surrogate! *MD Whistleblower*, 1 August 2010. http://mdwhistleblower.blogspot.com/2010/08/evidence-based-medicine-in-disguise.html
- Kligman, G. (1998). *The politics of duplicity: Controlling reproduction in Ceausescu's Romania*. University of California Press.
- Marczak, J., Sigle, W. and Coast, E. (2018). When the grass is greener: Fertility decisions in a cross-national context. *Population Studies*, 72(2), 202–216. https://doi.org/10.1080/00324728.2018.1439181
- Mishtal, J. (2012). Irrational non-reproduction? The 'dying nation' and the postsocialist logics of declining motherhood in Poland. *Anthropology & Medicine*, 19(2), 153–169. https://doi.org/10.1080/13648470.2012.675048
- Newman, S. (2019). Weddings without the groom: new no-marriage movements. *Psychology Today*, 8 August 2019. https://www.psychologytoday.com/gb/blog/singletons/201908/weddings-without-the-groom-new-no-marriage-movements
- Neyer, G. (2011). Should governments in Europe be more aggressive in pushing for gender equality to raise fertility? The second "NO". *Demographic Research*, 24(10), 225–250. https://doi.org/10.4054/DemRes.2011.24.10
- Qian, Y. (2019). Why young people in South Korea are staying single despite efforts to spark dating. *The Conversation*, 12 February 2019. https://theconversation.com/why-young-people-in-south-korea-are-staying-single-despite-efforts-to-spark-dating-111486.
- Rindfuss, R. R. and Choe, M. K. (Eds.) (2016). *Low fertility, institutions, and their policies:* variations across industrialized countries. Springer International Publishing. https://doi.org/10.1007/978-3-319-32997-0
- Rubery J. (2009). How gendering the varieties of capitalism requires a wider lens. *Social Politics*, 16(2), 192–203. https://doi.org/10.1093/sp/jxp012
- Sigle, W. (2016). Why demography needs (new) theories. In D. Mortelmans, K. Matthijs, E. Alofs and B. Segaert (Eds.), *Changing family dynamics and demographic evolution: the family kaleidoscope* (pp. 271–233). Edward Elgar. https://doi.org/10.4337/9781785364983
- Sigle, W. (2021). Demography's theory and approach: (How) has the view from the margins changed? *Population Studies*, 75(sup1), 235–251. https://doi.org/10.1080/00324728.2021. 1984550
- Temple R. (1999). Are surrogate markers adequate to assess cardiovascular disease drugs? *Journal of the American Medical Association*, 282, 790–795. https://doi.org/10.1001/jama.282.8.790

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