Fertility in the Age of Demographic Maturity:
An Essay

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Abstract

As humanity is moving into a new age of its demographic evolution, I call it demographic maturity, the emerging demographic configurations – generational sub-replacement fertility, advanced aging and potential population implosion – call for new ways of thinking about population and new policy approaches. While we live longer and healthier, we also reproduce less and less. We are stuck in a culture of low fertility. The strong motivations for foregoing motherhood are financial: a two-salary wage is better than one even for the higher middle class. No less important is the woman’s financial independence in a societal environment where marriage as an institution is under considerable stress. Motherhood is to be rewarded adequately for its highly important social role and it has to be sufficient to reassure potential mothers of their financial concerns. What is required is a more balanced resource allocation between production and reproduction. The old welfare type hand-outs like child bonuses do not work. Societies, particularly the rich, ought to realize that to raise fertility, even to generational replacement level, not only is a much greater financial effort called for but some of the tenants of the liberal economy need to be put into question to make room for social concerns such a renewal of generations, if they want to survive.
as national entities. This essay advocates a stationary population as the best response to challenges such as ecological health, national identity and cohesion, and possibly world peace.

**Key Words:** Demographic maturity, low fertility culture, production versus reproduction, stationary population

**Résumé**

À une époque où l’humanité avance vers une nouvelle ère de son évolution démographique, ce que j’appelle l’ère de maturité démographique, les configurations démographiques émergeantes – le taux de fécondité sous le seuil de remplacement, le vieillissement avancé, et l’implosion potentielle de la population – nous requièrent de trouver de nouvelles manières de penser en matière de population ainsi que de nouvelles approches dans l’élaboration des polices. Bien que nous vivions plus longtemps et en meilleure santé, nous nous reproduisons aussi de moins en moins. Nous sommes enlisés dans une culture de basse fécondité. Les motivateurs qui ont le plus d’impact sur la reproduction sont financiers : un salaire biactif est préférable à un salaire unique pour la classe moyenne élevée. L’indépendance financière des femmes dans un environnement social où le mariage est une institution en danger est aussi importante. La maternité devrait être adéquatement récompensée pour l’importance de son rôle social et cela devrait être suffisant pour rassurer les mères en puissance au sujet de leurs préoccupations financières. Une allocation de ressources mieux équilibrée entre production et reproduction est nécessaire. Le bien-être social de charité d’autrefois, tel que les allocations familiales, ne fonctionnent pas. Les sociétés, particulièrement les riches, devrait réaliser que pour rehausser le taux de fécondité, même simplement au seuil de remplacement générationnel, ne requiert pas seulement un plus grand effort financier mais aussi que certaines des doctrines de l’économie libérale soient remises en question pour faire place à des préoccupations sociales telles que le renouvellement générationnel, s’il compte survivre en tant qu’entité nationale. Cette thèse prône un système de population stationnaire comme étant la meilleure solution pour les défis modernes tels que la santé écologique, l’identité et la cohésion nationale, et possiblement la paix dans le monde.

**Mots-clés:** Maturité démographique, culture à basse fécondité, production contre reproduction, population stationnaire
Introduction

We are often so absorbed by our own research, mostly narrow in scope, that we don’t see the big picture. It is good to take a breath once and a while - sit back, and reflect precisely on the bigger picture. What is it? Where do we stand in the demographic evolution? Where are we heading? I would like to reflect on the current low fertility regime in the broader context of contemporary demography. It should made clear right from the outset that this paper does not claim the status of a full-fledged research article with all its cannons being met. This is an essay, a discussion paper.

Specifically, this essay is geared towards the following three broad topics:

• first, demographic maturity as an emerging new era in the demographic evolution of humanity;

• second, stationary population as an optimum solution for some of the major problems faced by humanity, not the least of which are ecological stresses, fertility versus immigration options, national identity;

• third, reassessing the childbearing public support by shifting the debate from the prevailing welfare framework to a broader framework of resources allocation between production and reproduction.

I chose these topics because I felt they are important for the understanding of what is going on at the present juncture of the demographic evolution and what it takes to meet the emerging challenges. As contentious as these ideas are or may appear to be, and maybe for this reason, they stand, at least it is hoped, to incite us to get into population policy debates that are now by and large missing. One can indeed easily anticipate disagreement with my stance on these matters. There is plenty of substance for arguing for and against it.

Demographic Maturity: A New Era in Demographic Evolution

My reading of events in contemporary demographic history is that humanity is entering a new era of demographic configuration. Western Europe is already there, many other countries are following suit and are even overtaking Europe in this regard (Japan, Korea, Taiwan). Now,
what is this new era that in my view is so unique, so radically different from the one – demographic transition – we are leaving behind? I would argue in what follows that humanity is entering a post-transitional, unprecedented era in population evolution with its two defining moments – one related to health and longevity; the other to procreation. While we as individuals live longer, we reproduce ourselves less and less. Our reproduction levels are consistently low, below the generational replacement level.

Not only do we live longer, but we are also healthier when we reach the upper level of our life span. The limits of survival are being slowly pushed upwardly. What are those limits can only be conjectured. But there is no doubt that further gains are to be expected due to advances in medical technology, organ transplantation and genetic engineering. Let's not overlook the very real benefits of a healthier lifestyle – a better and balanced diet, non-smoking public environment, physical activity. To be sure we have to be vigilant. The deadly scourge may just be below the surface, around the corner. The AIDS epidemic came out of nowhere or so it appears. But, while remaining circumspect we are entitled to be optimistic on the account of future prospects for longevity and quality of life.

Yet, at the same time, fertility has gone down dramatically. In Western Europe total fertility rates are in the range of 1.5 to 1.8 births per woman, according to the most recent UN statistics (2008). Lower rates are observed in Southern Europe (Italy and Greece 1.3 and Spain 1.4). In most of Eastern Europe countries they are still lower. For instance, Poland, Ukraine, Belarus and Slovakia post 1.2 births per woman; the Russian Federation 1.3; Romania 1.3. And so is in countries of Eastern Asia: Japan, 1.3; Korea 1.2 births per woman. The sub-replacement fertility phenomenon is gaining momentum so much so that it becomes global, spreading over to less developed countries. In most Muslim countries, with all their traditionalist and conservative reputation, fertility has plummeted to the replacement level. It is true in Tropical Africa. Many countries there still withstand the trend. The Democratic Republic of Congo is at the same level of fertility as it was when I left it in 1961. But again, this is a matter of time, and fertility is already declining in some African countries, particularly in the South. There is nothing to bewail in this global downward fertility drift. One can only imagine, if high fertility was still dominant, what population explosion the world would be facing, with all its possible deleterious consequences (e.g., ecological collapse, international conflicts over scarce resources, such as water).

On the other hand, we need to be aware of sub-replacement fertility as an enduring feature of our demographic reality. The process could be irreversible. Population implosion, not as temporary occurrence, but as an
exponential trend, is well in the offing. This is already the case in Eastern Europe and in some Asian countries (Japan, Korea). Were it not for massive immigration, that would by now be the case in Western and South Europe, and in Canada too. Sub-replacement fertility is thus becoming so prevalent throughout the world that it becomes a *sui generis* topic of interest to demographers. They even went as far as to concoct new vocabulary such as *hyper low* fertility or *lowest-low* fertility to differentiate from *moderately low* fertility.

Yet, for some students in population what is occurring now is nothing really novel; rather they regard it as an extension, an amplification of the demographic transition we know. They call it *second demographic transition*, referring namely to changes in peoples’ matrimonial behaviours. Associated with such prominent names in contemporary demography as Ron Lesthaeghe and Dirk van de Kaa, the second demographic transition theory has gained a wide acceptance indeed. My view is that we shall reserve the term “*demographic transition*” to that unique period in human history that was the shift from the traditional high vital rates to the modern low. It might be not irrelevant to remind the reader that even before the events fully unravelled, the well known French demographer of an earlier generation, Adolph Landry, spoke of “révolution démographique.” And it was. Still others call this new demographic era just *post transitional stage*, others *post-modern* without really engaging into finding out what does it really imply, theory and policy-wise. For my part, I see it as a *new age* in population evolution, one I would like to dub the *regime of demographic maturity*. The matter is not just that of semantic. The matter is one of perception of what actually happens in global demography that sets upside down much of what we knew so far. And it also has far-reaching policy implications. The public choice is between “laissez faire” policy and one involving deliberate actions, call it interventionist, to either enhance or counter the unfolding trends depending on how they are being perceived from the stand point of public good.

The term “*demographic maturity*” may make some people uneasy. Once maturity is reached, death follows inevitably. And that may be so. Not only individuals are mortal, but so are nations and societies. The great British historian Arnold Toynbee has identified 23 or more civilizations that have vanished from the earth in the history of mankind, the latest in Europe being the Roman Empire. And how many more nations have actually disappeared? He didn’t count. For him the entity of historical study is not the nation but civilization. Yet, my vision of demographic maturity, though inspired by sociobiology, has a *redeeming* virtue. Maturity does not necessarily mean the end of the world. We can be old and yet enjoy vitality, as individuals and as a
nation. A nation’s healthy maturity can be maintained indefinitely, speaking in terms of historical time. It can be maintained by a demographic policy that responds to the imperatives of self-reproduction, as we shall see later. A policy of demographic preservation through self-reproduction is not only desirable; it is imperative for the survival of a demographically mature society, as a national entity.

Everything considered, what is important to recognise is that humanity is moving into a new age of its demographic evolution, and that the emerging demographic configuration – generational sub-replacement fertility, advanced aging and potential population implosion – requires a new way of thinking about population and new policy approaches. And this leads me to the second topic listed at the beginning of this presentation.

Stationary Population as a Policy Option

Policy response to sub-replacement fertility and implied population decline, actual or prospective, varies among nations. Western Europe and English speaking countries have opted for large-scale immigration in response both to the need to maintain population growth and to satisfy the ever-growing demand for a labour force in an economy bent on growth and profit. The populationist instinct remains strong in some of these countries, most notably in France and Canada. In Canada, for example, both liberal and conservative governments pursue a policy of maintaining the population growth momentum by means of massive immigration. Yet, it is patently clear that a sustained immigration to maintain growth in a country that no longer reproduces itself is bound to seriously affect the country’s historical national identity. By contrast, Eastern European countries – both those of the former Soviet Union (Russia, Ukraine, Belarus and Baltic countries) and those now part of the Union of Europe (Poland, Rumania, Hungary) – remain antagonistic to any idea of immigration to compensate for population losses, with the exception of temporary migration from eastern countries, particularly from Ukraine and Belarus. Asian Far Eastern countries, namely Japan and Korea, notwithstanding the significant decline in population that does not seem to slow down, have so far refrained from immigration in the name of the country’s national integrity. Whatever immigration intake filtered in so far in these countries it is highly selective and restrictive.

The policy advocated herein is a policy aimed at achieving in the long run a stationary population with a self-reproductive capacity. This is by no means a novel concept: “It must always have been seen, more or
less distinctly, by political economists, that the increase of wealth is not boundless: that at the end of what they term the progressive state lays the stationary state...” These words were uttered more than one and a half centuries ago by the famous British thinker John Stuart Mill (1848, 1965: 746). The concept has been resurrected since then under various guises, the most notable one by the proponents of the so-called “Zero Population Growth” in the post-war years. It seems to me that the advent of the demographic maturity regime, along with social and technological developments underway world wide (but more so in economically advanced countries), warrant a fresh look at the idea of the stationary state.

The virtue of a stationary population is that it avoids, on the one hand, the prospect of demographic saturation in a finite space with all its negative ecological and political attendants and, on the other, the prospect of exponential population implosion and demographic attrition. While population growth creates its share of problems, protracted population decline is not a desirable prospect either for reasons of economic and national security. A stationary population configuration best addresses current concerns such as, environmental, demographic (i.e. low fertility and high immigration), and national identity and social cohesion.

As of late, environmental concerns are in the forefront of public debates, both nationally and internationally. In highly industrialized countries where per capita propensity for pollution is highest on account of both the population size and the levels of technology generating toxic waste, the problem is of the highest acuteness. Even with all the warning over the potential collapse of the ecosystem and world order, it would be naive to think that people will ever be less selfish or voracious in their consumption habits. Yet, if at least one key factor in the environmental equation – namely, population growth — can be brought under control, it would be in itself a giant step forward.

A reduced and better targeted immigration policy would allow a more complete integration of immigrants into mainstream society, and insure greater social cohesiveness, thus alleviating the legitimate concerns for potential social divisiveness and national identity. As David Coleman (2008) pointedly argues, migration has become a powerful new engine of demographic and social change in the Western world. Demography is emerging as the driving force in redrawning the political, social and ethnic landscape nationally and potentially world wide. Yet it has to be clear that nations are not constructed instantly or artificially, and that social constructs divorced from human nature and history can be troublesome.
Hence, from whatever vantage point the question is approached, it is fair to argue that stationary population stands out as the optimal solution to many of the fundamental problems humanity is facing.

But is the project of a stationary population feasible, and how so specifically? I am inclined to respond affirmatively to the question. Never in the modern history of human demographic evolution have the conditions for its realisation coalesced as much as in recent times. The movement across international borders of know-how rather than of human beings, as well as out- and in-sourcing of work without the physical displacement of peoples, are at least partly alternatives to the ever-growing demand for workers. So is also the increasing use of labour-saving automation, as substitute for unskilled workers, in particular. Not overlooked should be the use of productive potentials offered by the growing elderly but healthy segments of the population. Yet, it must be clear that stationary state can not be dictated from above, created at the will of the government or anybody else. But as with many social constructs it can be achieved through awareness, public debates, appropriate government initiatives, and legislation, all of which may bring us incrementally closer to its realisation. (For a more elaborate discussion of stationary population, its rationale and feasibility, the reader is referred to my paper (Romaniuk 2009).

Assuming now that the project of stationary population can be brought to fruition, the question arises whether there is any optimum level for population to choose? I do not think there is any clear-cut answer to this question. The much debated optimum population theory in the pre- and post-War days, though it might have been helpful for gaining insights into the complex relations between population and its ecological, economic and technological environments, albeit under static conditions only, has hardly led to any determination thereof. Nor do I think its contemporary derivatives, sustainable development and alike, offer any answer to the question in a dynamic ever-changing world that is ours. We would be better off taking a pragmatic approach in this matter. Some countries that are already overpopulated, with high habitat density (England, Benelux countries, Germany, Japan, South Korea) may actually benefit from population reduction, namely by somewhat alleviating the pressure on space arising from overcrowding (Kono 2009). In Eastern Europe (Ukraine, Russia, Romania, Baltic countries), where population has consistently plummeted to even lower levels for the last 15 years or so, may actually look forward to some demographic recovery, which could bring these countries to the pre-decline level. What is important in my view is that nations do try to stabilise population at around zero growth at whatever level it might be feasible.
We shall now turn to our remaining question, how to ensure a sustainable stationary population as a self-reproductive entity, that is, how to raise fertility to the generational replacement level.

A More Balanced Resource Allocation between Production and Reproduction

Traditional family support programs of the welfare type, like child allowances, maternity leave, day care, and similar handouts delivered in small doses, will not do the trick. A much more radical policy approach is called for to maintain fertility at a level compatible with the demographic renewal of the population, that is, about two children per woman.

In order to achieve such a policy goal, we need a more balanced allocation of national resources between production and reproduction, that is, between material and immaterial resources allocated to producing goods and services, on the one hand, and those allocated to conceiving, bearing and raising children, on the other. But how can this be done? It is more easily said than done. There are purely technical problems and also issues with public perception.

Technically, one can depict the idea of balancing off resource allocations as a matrix of relevant variables along the two axes — production and reproduction — within an analytical framework of econometric type that can be operationalized to demonstrate the outcome under different scenarios of the trade-offs. But what specifically are these variables? Their identification and conceptualisation alone are difficult tasks. When does a reproduction variable become a production variable and vice-versa? We may grasp the matter intuitively and on a very elementary level, but the matter becomes complex when one thinks through the process to the point where one can say, ‘Here, there is a working model.’ We need to engage in simulation exercises by means of suitable econometric models to assess the impact of trade-offs on both economic and childbearing performances, and come up with some kind of optimisation. Such a model of optimisation between production and reproduction trade-offs is not a one individual task. It requires a multidisciplinary team.

On political front, one would need to overcome the prevailing public scepticism that anything at all can be done to alter peoples’ attitudes and behaviour in the matter of procreation, short of some kind of legislative imposition from above of a two children family policy. That is not for our liberal society.
However, if it is true that the single most powerful factor that drives so many women into gainful employment, away from motherhood, is financial considerations, as I am inclined to believe, then wouldn’t it be right to assume that maternity disinclination can be beaten by the same means – through proportionate financial and family support incentives? I have advocated salary-equivalent, or something of that kind, for women who choose to pursue motherhood (fatherhood) (Romaniuc 1998). The question as to how the principle can be applied in concrete situations to make it a workable policy would require a great deal of thinking and research to choose among many possible combinations.

This said, no one should underestimate the obstacles to even considering, let alone implementing, the project of a major shift in the allocation of resources from production to procreation. Wealth and growth are very human, inborn and socially cultivated virtues (although sometimes predicaments). Consumerism is in full swing, supported by advertising and the availability of credit, making consumption of superior goods and all new brands on the market affordable to rich and the less rich. To quote Galbraith, “wants are increasingly created by the process by which they are satisfied” (1958: 128). And there is a strong aversion to any antithesis to growth. Any impediment, the smallest setback in aggregate economic growth, as well as the first signs of a recession, send alarm bells across all spectrums of economic activity, nationally and internationally. As Homer-Dixon puts it, “Our societies and economies – as currently set up – need constant growth to maintain social and economic stability” (2006: 192).

Yet, the idea of balancing production imperatives and reproduction goals to ensure generational renewal as a long-term proposition, deserves an honest consideration rather than being dismissed off hand as farfetched or utopian. Conceptually and technically, the task is complex. Politically, it might be a formidable challenge. But its implementation, once the principle is politically accepted, may be less daunting than it may appear at first sight. Under stationary conditions, the demands for children, and immigrants as well, are less than under the population growth scenario. Moreover we may not need to push the financial incentives for maternity to the point of competing with employment wages to make the difference. Much less may suffice to induce couples to increase their family size, modestly but sufficiently to meet targets close to generational replacement levels. Nor does this writer advocate, in his conceptualisation of the stationary population as a long term policy goal, a population closed to immigration — not at all. Transnational flow of people is an important factor of cultural cross-fertilisation among nations and as a mechanism to bring about an economically more prosperous and egalitarian world society, in the long
run. From the point of national cohesiveness and identity, the concern is that of immigration size and integrability.

So much for reproduction (i.e., procreation). As for production, there is nowadays a far too heavy emphasis on economic imperatives economic growth at any cost. Yet, this mindset too can be challenged, and in fact it is already being challenged in the spirit of social harmony, environmental concerns for the planet health and creative endeavours other than purely material. There is nothing indeed immutable or sacrosanct in the liberal economy that cannot be challenged to make room for social concerns, including the renewal of generations, without falling into the trap of a centrally planned command economy. Mill’s (1848) admonishing his fellow country men over their uninhibited appetite for yet more wealth, and his call to temper the growth impulse by redirecting the human effort towards less materialistic, more creative goals, has gained adepts (Daly and Cobb 1989). Community-building aspects of human activities is one example thereof; all-out humanitarian and technical assistance, the transfer of know-how to help poor countries overcome poverty, would be another. Granted these exhortations may sound idealistic, all too human, and it might be so. But who tells us the building-up of wealth, well-being material and immaterial, can not go on by virtue of the technological advances and human ingenuity in a society bent more on the quality than on numbers of its members?

**Concluding Comments**

In this essay I have laid down three major themes for demographers to mull over. Again, they are: (1) the new demographic age, spearheaded by the economically most developed nations, that humanity is entering the age of demographic maturity; (2) the stationary population in the long run as an optimum solution to many problems humanity is facing, more specifically in regard to the environmental health of the planet, national identity and social cohesion; and (3) the quest for a more balanced allocation of resources between production and procreation so as to achieve a self-reproductive stationary population in the long run. A great deal more thinking over conceptual, technical and political prerequisites is called for than is possible here. This paper is only a very first step in this direction.

I am offering one vision, one policy option, namely that of a stationary population. Others that may come up with different options, one of a growing population or, why not, one of a smaller population by reducing immigration, the birth rate being already under replacement level in many countries. Still others may opt for a laissez faire approach,
arguing that any population policy is pointless, particularly in the global economy, and that not only should the government keep its hands off of childbearing decisions by individuals, but all barriers to immigration should also be removed. All options should be on the table for open uninhibited debate.

**Acknowledgement**

Responsibility for any errors rests with the author.

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