## Demographic perspectives on agrarian transformations and 'surplus populations': supply-side banalities versus redistributive imperatives

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This paper frames the discussion of agrarian transformations and 'surplus populations' in the Global South within a political economy and macro-structural consideration of the developmental challenges faced in the context of contemporary rapid population growth. The case is made that the prospect of an additional two billion people by mid-century needs to be urgently pre-empted by a radical trajectory shift towards (or back towards) strong redistributive institutional mechanisms, within which universal social policy needs to play a central role alongside other developmentalist initiatives aimed at retaining wealth in countries of the Global South and circulating wealth among increasingly tertiarised labour forces. Short of such radical shifts, the predominant supply-side emphasis in contemporary mainstream development policy – as represented, for instance, by much of the World Bank sponsored work on the 'demographic dividend' – arguably exacerbates the dilemmas of 'surplus populations', as laid out by Li (2009), that is, the increasing informalisation, casualisation and effective underemployment of labour transitioning to urban tertiary sectors in the Global South.

This case is made in three steps. First, many of the common discourses and debates about the impoverishing consequences of rapid population growth are critically reviewed in order to lay out a political economy understanding of vulnerability in the context of population growth and to offer a more subtle distinction between processes of human development on one hand, and processes of capitalist economic development. Second, the relationship between population transitions and labour transitions is sketched out, noting that the latter are primarily driven by the former even in contexts where offfarm and/or urban (formal and/or decent) employment generation remains anaemic. Third, similar to the principle first stated by Gershenkron (1962) with regard to late industrialisation – that the later the industrialiser, the greater the imperative to pre-empt and support industrialisation with the implementation of universal social policies – the imperative for instituting strong redistributive mechanisms also becomes greater the later (and faster) the demographic transition.

In other words, there is an even greater precedent for universal social policy in the Global South today than in the past – such as practiced in South Korea and Taiwan in the 1950s and 1960s – in part because of the faster speed of demographic transitions occurring now than in the past, and also because even strong forms of national

developmentalism can no longer be presumed to produce the same equalising effects via employment and local retention of value-added as they might have in the past. Unfortunately, besides fairly marginal initiatives in the realm of social protection, contemporary mainstream development policy is still a long way off from seriously engaging with redistribution, if not turning the other direction under the pressure of the recent rise of rightwing politics in the Global North in response to the recent financial crisis.

#### Introduction

According to latest United Nations estimates, the world's population passed 6.9 billion in mid-2010 (UN 2010). An estimated 79 million people are currently being added to this total each year, so we should reach 7 billion people by late 2011. Given that fertility and birth rates have been declining worldwide, this annual addition is also declining. Hence, according to a recent UN projection exercise (see UN 2004), our global village is predicted to peak at 9.22 billion in 2075. Close to the totality of this increase is destined to take place in the Global South, with the bulk occurring in the poorest of these countries, particularly in Sub-Saharan Africa and South and Central Asia. Moreover, while these projections are made on the basis of fairly conservative mid-range guesstimates of how fertility and mortality will change over the next 40 years, the bulk of global population increase is more or less guaranteed by population momentum, even if fertility falls much faster than expected. In other words, today's baby boomers in countries such as Yemen, Uganda, Mali and India will keep population growing in these countries for the next generation even if they quickly reduce their fertility to below replacement levels (i.e. below two children per women on average).

What does this imply for strategies of social protection in developing countries? The World Bank currently estimating that there were around 1.4 billion people in 2005 living at or below 1.25 purchasing power parity US dollars a day (the meaning and measure of which is a source of intense debate, even among World Bank economists).<sup>2</sup> What will happen with the addition of a further two billion people, mostly among the ranks of the relatively poor, and how can social protection address this looming situation?

This paper frames the discussion of social protection within a political economy and macro structural consideration of the developmental challenges in the context of such rapid population growth. It is written as a thought piece, making the case that the prospects of an additional two billion people by mid-century needs to be urgently preempted by implementing employment and equity-focused development strategies now, within which the scaling up of social protection needs to play a pivotal role.

<sup>&</sup>lt;sup>1</sup> The total fertility rate is the average number of live births that women have in their child-bearing years (generally from 15-45 years) at a particular point in time (hence, it is an average across generations). Faster fertility decline would lead to an earlier and smaller peak population, whereas slower fertility decline would lead to a later and larger peak.

<sup>&</sup>lt;sup>2</sup> See Chen and Ravallion (2008). Also see the work of Angus Deaton for in-house debates over these measures. For a broader critique, see Fischer (2010a).

This case for scaling up social protection is made in three steps. First, given the crucial role of population growth in matters relating to social provisioning, employment generation or environmental sustainability in countries of the Global South, it is important to critically review many of the common discourses and debates on the impoverishing consequences of rapid population growth in order to ground our discussion of social protection in some of updated insights from the field of population studies. In particular, some of basic premises of neo-Malthusian notions of povertypopulation-environment downwardly-reinforcing spirals, which still predominate in policy and even much academic discussions of population and poverty, have been largely refuted by much of contemporary demographic research given the fact, now recognised by many demographers, that poor people can and are rapidly reducing their fertility. This refutation, however, does not necessarily fall into an opposite anti-Malthusian position of dismissing the potentially impoverishing impacts of rapid population growth. Rather, the paper lays out a political economy understanding of vulnerability in the context of population growth that offers a more subtle distinction between processes of human development on one hand, and processes of capitalist economic development, hierarchy and power on the other. Second, the relationship between population transitions and labour force transitions towards off-farm employment and urban areas is sketched out, pointing out in particular that the latter are primarily driven by the former even in contexts where off-farm and/or urban (formal and/or decent) employment generation remains austere. Third, given the very common contemporary reality of employmentaustere growth in the Global South, there is a crucial need for strong redistributive mechanisms and institutions within contemporary development policy. The scaling up of social protection systems towards more universalistic forms of social policy, or towards a notion of 'transformative social policy' (as per UNRISD 2010), can play a key role in this endeavour. This role is demonstrated in examples of past successful late industrialisation, although there is arguably an even greater precedent for such redistributive mechanisms today given that even strong forms of national developmentalism can no longer be presumed to produce the same equalising effects via employment and local retention of value-added as they might have in the past. Hence, the principle – as first stated by Gershenkron (1962) – that the later the industrialiser, the greater the imperative to preempt and support industrialisation with the implementation of universalistic social policies, arguably holds more than ever today, particularly considering the complementary role that well functioning social policy systems also play in reducing population growth through non-coercive and right-respecting means.

### 1. A brief review of debates on poverty and rapid population growth

There are a variety of perspectives on the question of the impoverishing consequences of rapid population growth, some more alarmist, others more reassuring. The alarmist tends to dominate public perception of population issues. These are often known as Malthusian, named after Thomas Malthus, who predicted in the late eighteenth century that population growth would outstrip food production, resulting in famines, disease, war and other calamities that would ultimately keep population growth in check.<sup>3</sup> Such extreme

<sup>&</sup>lt;sup>3</sup> Notably, Malthus modified his argument in the second edition of his essay, admitting that populations had the ability to avoid such devastations through self-regulation. Apparently, this was in part inspired through information he received about Tibet (see Childs 2008).

predictions have also had their modern iterations. For instance, similar predictions were made in the 1960s and 1970s in iconic books such as *The Population Bomb* (1968) by Paul Ehrlich, and *The Limits to Growth* (1972) by Donella H. Meadows, Dennis L. Meadows, Jørgen Randers and William W. Behrens III, a team of authors at the Club of Rome think tank. All of these authors predicted various versions of calamity and disaster on account of rapid population increase and finite resources compounded by modern economic growth. Although these dire predictions failed to transpire, Ehrlich nonetheless repeated his alarm, together with Anne Ehrlich, in *The Population Explosion* (1990). Kenneth Smail, a US anthropologist, has also re-invoked Malthus for the 21<sup>st</sup> century, arguing that Earth's long-term sustainable carrying capacity may not allow for much more than two to three billion people (i.e. the population of the world in 1950). These views definitely have their appeal, as they continue to underwrite typical journalistic discourses on population and food production, such as the idea that rising population results in rising food prices, which in turn results in food riots, potential food and water wars, hunger and starvation, and so on.

Many of these messages have also been contentiously tied up with quite xenophobic and anti-immigrant undertones. In *Population Politics* (1993), Virginia Abernethy, an anthropologist in the US who has described herself as an 'ethnic separatist', argued that aid to developing countries causes women to have more children, thereby exacerbating overpopulation. More recently, she has been involved in the controversial Protect Arizona Now anti-immigration movement. Similar undertones undoubtedly permeate anti-immigrant sentiments in Europe, as reflected by the idea that Europe is 'full' or overcrowded (conveniently after several hundred years of colonialism). Indeed, the association of such reactionary attitudes with population control is partly to blame for the negative connotation that family planning has come to evoke among more progressive folk, adding to the human and gender rights concerns regarding the intrusive abuses on women's lives that family planning has often entailed. This being said, family planning has also been under attack by the religious right for other reasons, with no doubt a fair share of cognitive dissonance.

In retrospect, Malthusian predictions have not, as yet, come to pass. Mass famines have largely been averted (outside of specific regional events) because the world has managed to increase food supply in tempo with population growth, if not more than compensating for population growth. This point is avidly pointed out by many 'anti-Malthusians', perhaps best epitomized by the work of Julian Simon, e.g. *The Ultimate Resource* (1981[1998]), who attacks ideas of scarcity with a Friedmanite faith in the ability of free markets and human innovation to deal with population growth. The well-know Danish economist Ester Boserup is also often considered to be part of this camp given her arguments concerning societal adaptations and innovations in response to population growth, although she emphasized that these changes take place over long sweeps of human history. Unlike Simon, she apparently never conceded that technological change could sustainably cope with the rates of rapid population growth witnessed over the last sixty years in large parts of the Global South and is not necessarily the result of short-term market mechanisms.<sup>5</sup>

<sup>4</sup> For instance, see Smail (2002).

<sup>&</sup>lt;sup>5</sup> I am indebted to Tim Dyson for this insight. Also see Boyd and Slaymaker (2000) for a good summary of the debate over these issues raised by the famous Machakos case in Kenya.

It is true that increases in food production over the past 60 years have been achieved through the intensified use of chemical fertilizers, particularly synthetic nitrogen fertilizers. This dependence has questionable environmental consequences including the fact that nitrous oxide is a powerful greenhouse gas; nitrogen fertilizers leach nutrients from soils and have problematic consequences on downstream ecosystems; and their production is dependent on limited and regionally concentrated supplies of raw materials (such as potash, over 50 percent of which is produced in the Canadian prairies). More broadly, 'Green Revolution' technologies are energy intensive and dependent on petroleum-based resources (including, for instance, the use of plastics). These points have been discussed at length by some leading experts in the field of population and development, such as Vaclav Smil (1997; 2008), Tim Dyson (1996; 1999; 2001; 2005), or Nikos Alexandratos (2005). Indeed, Dyson (2001) clearly demonstrates that the world has been meeting its aggregate food needs up to the 1990s, thus dismissing crude apocalyptic Malthusian claims, but he nonetheless clarifies the unequally distributed aspects of this aggregate production at regional and sub-regional levels. In Dyson (2005), he further elaborates on the prospects for a global or macro-level neo-Malthusianism, not one based on the deficiencies of the poor but, rather, one that focuses more appropriately on the long-term impacts of our modern industrial way of life on climate change.

In contrast to Dyson's industrial systemic lens, a form of neo-Malthusian thinking that focuses on poor people has tended to dominate depictions of population growth in sustainable development and anti-poverty campaigns, even though these depictions have been largely refuted by much of contemporary demographic research. Such neo-Malthusian perspectives often rely on the idea of poverty-population-environment interactions, coined as the 'PPE spiral' by UNICEF in the 1994; poverty induces higher fertility (or else prevents the reduction of high fertility rates) and higher population growth among poor people because children are seen as providing old age security, extra labour and income, and compensation for higher mortality. This places pressure on the environment and leads to environmental degradation, which in turn worsens poverty. The poor are thus doomed to a spiral of worsening poverty until they can either lower their birth rates or else be lifted out of poverty by some other means, so as to break their perceived need for more children. The argument is based on a simplistic statistical extrapolation that, because poor people have more children than rich people, worsening poverty must therefore cause higher fertility, or else prevents its reduction from very high levels. High fertility is similarly assumed to contribute to impoverishment, at least among poor households.

Among the reactions to such arguments, some people take an opposite position of arguing that overpopulation is a myth, as discussed above with reference to Simon (and even Ross, from a Marxist perspective). Interestingly, the Netherlands often appears in these arguments given that it presents a quintessential case of relatively rapid population growth on a very small piece of (very wet) land, simultaneous with economic improvement over several centuries. However, it is of course simplistic to compare the historical experience of the Netherlands, when it was at the height of its colonial power, to the experience of poor countries today. Nor should the rejection of neo-Malthusian arguments lead us to the opposite extreme of abandoning family planning altogether, the consequences of which might be severe in poor countries that are currently growing far

faster than the Netherlands ever grew. Indeed, many aid-financed family planning programmes already suffered from such a predicament when President George W. Bush re-imposed the Global Gag Rule on the U.S. Agency for International Development (USAID) population program in 2001.<sup>6</sup> Similar set-backs were suffered in many family planning and HIV/AIDS programmes in Africa from 2003 onwards when Bush cut funding for condoms and insisted that recipient countries of his emergency aid plan for AIDS relief must emphasise abstinence over condoms and must condemn prostitution.

While the neo-Malthusian logic holds considerable appeal, some of its basic premises have been largely refuted by contemporary demographic research, pointing us towards a much more nuanced understanding of poverty-population interactions. Broad agreement among demographers also represents, to some degree, certain advances that have been made in the field of population studies since the 1970s, when pessimism reigned in both academic and popular perception about the ability of the poor to lower their fertility. It is now accepted that fertility has been falling rapidly in poor countries – much more rapidly than was the case in Europe during its own fertility transitions in the nineteenth and early twentieth centuries – and that this is occurring largely irrespective of income level. At first, this took many demographers by surprise, such as the rapid fertility reductions in China in the 1970s or in Egypt and Iran in the 1980s and 1990s. However, even now, fertility is already falling rapidly in many African countries – much faster than many had anticipated – to almost replacement levels in a number of urban centres. There are only a few places in Africa where fertility decline has not yet started, such as rural Uganda, rural Congo, rural Nigeria, Niger and Chad. According to Michel Garenne, a leading expert in African demography, nobody would have predicted these developments twenty years ago. 8 Moreover, despite the recognised and intrinsic importance of girls' and women's education, uneducated rural women have also been reducing their fertility as well, such as in India, where around 60 percent of fertility reduction from 1991 to 2001 occurred amongst women with little or no education. Similarly, Sebti et al (2010) discuss how fertility decline in Morocco occurred in both urban and rural areas at a very similar pace despite large gaps in socio-economic development, except that the decline started earlier among urban and more educated women, intimating the precedence of socio-ideational dissemination over economic factors in triggering and driving fertility transitions. Similarly, they point out that fertility reduction and urbanisation occurred in an almost identical manner in Algeria, Morocco and Tunisia despite very different stages of economic development and levels of education in each country. As a result of these types of unexpected changes across much of the Global South, today's predictions of what the global population will be in 2050 are much lower than they were in the 1960s and 1970s – precisely because fertility decline has occurred much faster than anticipated.

The insight that poor countries and poor people can and do reduce their birth rates has driven much new thinking in demography since the 1970s. The field has since moved

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<sup>&</sup>lt;sup>6</sup> This rule restricted foreign NGOs that receive USAID family planning funds from using their own, non-U.S. funds to provide legal abortion services, lobby their own governments for abortion law reform, or even provide accurate medical counselling or referrals regarding abortion.

<sup>&</sup>lt;sup>7</sup> For a very interesting recent study of Democratic Republic of Congo, see Romaniuk (2011). Also see 2008 survey results for Nigeria and Sierra Leone reported in SFP (2011a; 2011b).

<sup>&</sup>lt;sup>8</sup> See the lecture by Michel Garenne summarised in Fischer (2010).

<sup>&</sup>lt;sup>9</sup> See Dyson (2010) for detailed discussion on these points, or else Fischer (2010) for an abbreviated discussion based on lectures by Tim Dyson and Michel Garenne.

away from older ideas rooted in a 'modernisation theory' perspective of population and development, and towards more subtle distinctions between processes of human development on one hand, and processes of economic development, hierarchy and power on the other. In other words, poor people are perfectly capable of 'modernising' demographically while still remaining poor economically, without making their way up the ladder of capitalist economic hierarchy. We can observe that fertility transitions are taking place throughout the world, usually with increasing rapidity the later the onset of transition, but this tells us little about the respective economic development paths that each society will take as it undergoes transition. Arguably, economic development paths are much more a matter of capitalism than of demography.

World population is nonetheless continuing to rise rapidly despite falling fertility rates, mostly in poor countries with limited resources. Moreover, increasing consensus among demographers about the proximate drivers of fertility reduction is overshadowed by wider political economy and distributive contentions. For instance, Ross (1999) contends that Malthusian and neo-Malthusian concerns about population growth obscure the real roots of poverty, inequality and environmental degradation in the political economy of capitalist development, with the result that alarm over the environmental impact of over-population ends out representing the poor as perpetrators of environmental destruction rather than as the victims of such capitalist development.

In other words, the poverty and hunger consequences of rapid population growth must be understood in distributional terms, not simply in terms of aggregate output and certainly not in terms of the behaviour of the poor, as if to blame the poor for their own poverty (as Malthus once did). Regardless of the ability of the world to produce enough food at the aggregate level to feed the growing global population, hunger persists in the world because this food production is not equitably distributed, leaving some parts of the world in surplus (even extreme surplus), and others in deficit (extreme deficit resulting in hunger and famines). Hence, it is not the supply of food at the global level that matters, but rather, the question of how food is produced and distributed at regional and local levels. This is as much a political economy question as a logistical one, as it is rooted in the power relations that govern both local and global economies. It also reveals the importance of monetary income given that, in today's liberalized world, it is largely the ability to purchase food that increasingly determines who gets supplied.

This distributional aspect of purchasing power at the local level can be expressed in terms of the ability of people to buy food, both in terms of having the money (or other means) to obtain food and also in terms of being able to use this money (or means) freely for that purpose. Indeed, this was the central theme in the earlier work of Amartya Sen, who proposed to explain famine through his somewhat convoluted 'entitlement' approach, which later evolved into his capability approach. His theorization has led to debates over whether famines are caused by declines in the availability of food or, as he proposed, by a breakdown in people's ability to purchase food despite sufficient supplies, among other issues of contention. However, the main point – one that was made long before Sen – is that poverty, famines, and hunger are as much issues of demand (or the inability to enact

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<sup>&</sup>lt;sup>10</sup> One of the most straightforward criticisms of Sen's work on famine is made by Dyson (1996: 74), who points out that in all five of the famines that Sen considers in his *Poverty and Famines* research, there is actually very strong empirical evidence of food availability declines, opposite to the claims that Sen made in order to build his theoretical case.

demand) as they are of supply. Indeed, Sen's entitlement approach can be seen as a more specified but also more abstract expression of ideas already laid out in much more intuitive terms by John Maynard Keynes in the 1930s in his theory of effective demand as a means to explain unemployment. Keynes himself acknowledged Malthus' work on famines as an important inspiration for his ideas on effective demand. Hence, following the trail of Sen takes us back to the classics, who were fundamentally interested in the political economy of distribution, unlike modern mainstream economists, who have tended to assume away the problem of distribution by collapsing it into an allocative issue of market clearance.

In terms of population growth, distributional questions can be considered at both micro and macro levels. At the micro level, population growth is generally experienced as an increase in the size of families, as a consequence of more children surviving to adulthood. Notably, such population pressure occurs even despite rapid reductions in fertility rates. This is because of population momentum, i.e. replacement-level fertility only replaces a population once parents and grandparents start to die, hence it might take a generation or more of below-replacement fertility rates before a population starts to stabilise and decline, particularly in a context of increasing life expectancy. In an agrarian setting, family-level population growth puts more pressure on land resources, as existing plots of land are stretched to support more people. In situations where land distribution is very unequal and where households with smaller landholdings struggle to subsist on their land (if they have land), such household-level population increase is obviously one factor that can drive poor families further into poverty, if they have no other recourse. However, this outcome must be considered precisely in light of inequality, agrarian labour regimes, and the availability of off-farm employment in both rural and urban areas.<sup>12</sup>

Notably, this strain on poor rural households is not resolved by commercializing agriculture (including, for instance, land leasing by transnational corporations in Africa), nor is it resolved by increasing the capital intensity of agriculture (for example, by using tractors instead of people). These types of change generally increase labour productivity, but at the cost of employing less people, and they do not necessarily make the land more productive. However, in the process, they tend to lead to land concentration and/or intensify the displacement of labour out of agriculture, thereby exacerbating both the strains on existing land use – particularly by small holders – while at the same time reducing the availability of employment on larger farms, which is usually the life-line of the landless and poor farmers who cannot meet their subsistence needs on their own land. Even the application of technology to increase food supply – where this does not lead to the exploitation or dispossession of small farmers – at best can only marginally compensate for an increase in household or family size by several members.

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<sup>&</sup>lt;sup>11</sup> See Wrigley (1997) for an excellent discussion of this point.

<sup>&</sup>lt;sup>12</sup> Indeed, it is interesting to note that in the famous Machakos case in Kenya, successful societal adaptation to environmental stress was achieved in part through increased inequality (due to intensification of labour in land use and greater social differentiation), as well as an ample supply of off-farm employment opportunities due to the proximity of Machakos to Nairobi. See the seminal studies on this by Tiffen and Mortimer (1992), Tiffen, Mortimore and Gichuki (1994), and Tiffen (1995). Also see Boyd and Slaymaker (200x).

<sup>&</sup>lt;sup>13</sup> Of course, there are debates on this in the agrarian studies literature, particularly with regard to land size productivity debates [cite some key examples]

A further consequence of these strains is the movement of some family members (or whole households) into off-farm activities. This was classically referred to as multiphasic responses by Kingsley Davis (1963), describing the ways in which people consciously or unconsciously respond in a variety of ways to the population pressures faced at the household level in a context of population growth. Alongside observations that such processes underlying employment transitions and urbanisation have been occurring in recent decades in contexts of little or no economic growth, many contemporary demographers have come to argue that demographic transitions essentially drive processes of urbanization, regardless of economic 'pull' incentives deriving from urban areas, in contrast to the more common belief that urbanisation results primarily due to economic growth and economic structural change. 14 In other words, urbanisation has generally been occurring irrespective of economic conditions in urban areas, or regardless of whether there are decent jobs and a viable living to be made in the towns and cities. Where there are not, rural-to-urban migration therefore often leads to the transformation of rural poverty into urban poverty, as employment transitions end up in unemployment or underemployment in urban areas – particularly in the urban informal sector – rather than in manufacturing and formal employment, as classically observed. Moreover, according to this demographic understanding, faster rates of demographic transition intensify these processes of urbanisation. Hence, even in a context where poor rural families rapidly reduce their fertility (as has generally been the case in most developing countries in comparison to the slower speed of fertility reductions in historical European experiences), faster rates of population increase (due to faster initial mortality declines) nonetheless place relatively greater strain on families going through these transitions than was historically the case in Europe during its own phase of rapid population growth.

#### 2. Employment transitions

This demographic understanding of urbanisation and related employment transitions serves as a particularly useful antidote to what might be described as supply-side approaches to employment generation in the Global South. 'Supply-side' in this sense refers to an attitude that, because urbanisation is driven by economic opportunities, the appearance of urbanisation must therefore imply that such opportunities exist and that the role of governments is to facilitate their maximisation through policies promoting labour market flexibility. <sup>15</sup> An alternative perspective – implicitly inspired from contemporary demography – is that governments must actively meet the changing supply of labour generated by such rapid social structural transformations through very intentional developmental and related policies, or else risk exacerbating existing conditions of unemployment and underemployment in both rural and urban areas, which labour market flexibility might in fact do little to address. As usual, the experience of East Asia serves as one of the central bones of contention in the representational disputes on these issues.

The former supply-side vision is well represented – implicitly and often in quite discrete ways – by much of the fairly optimistic literature on the 'demographic dividend' (or 'bonus'), particularly that emanating from the World Bank and related authors. The demographic dividend refers to the one-off opportunity that occurs during demographic

<sup>&</sup>lt;sup>14</sup> For an excellent discussion of this demographic understanding of urbanisation – as opposed to standard economic approaches – see Dyson (2011).

<sup>15 [</sup>Add some refs to this]

transition once fertility starts to fall and dependency ratios rise to an all-time one-time historical high for several decades. This period is called a 'dividend' or 'bonus' because it is a particularly opportune time for development, given that the largest share of population at any one point throughout history is in the working age groups and, hence, is in principle available to work, consume, save and/or invest, thereby proportionately reducing the amount of effort that families, communities and governments need to spend and invest in caring for dependents (young and old) rather than in productive activities. The occurrence of this period is indeed an established stylised fact of changing social structure, from a predominantly young population in the pre and early phases of transition, to a predominantly old population in the later stages of transition.

The argument in much of the academic work on this stylised fact is that a large part of the so-called 'economic miracles' of East Asia can be attributed to this dividend, i.e. the realisation of the benefits of rapid fertility decline that took place in countries such as South Korea, Taiwan and even China. 16 The problem is that many of these arguments rely on a sort of optimistic demographic determinism, in the sense that the story is often told in a causal supply-side manner, as if demographic transition drives employment. In reality, the dividend is a potential, in the sense that realising the benefits of the dividend ultimately depends on the ability of such 'economic miracles' to actually to employ the extra workforce. In other words, if the additional workers are not employed, the dividend is meaningless. The fact that the dividend is a potential is well recognised in the literature, although the precise implications are not, particularly regarding the fact that the East Asia miracles referred to are perhaps better characterised as following economic models of employment maximisation versus efficiency maximisation. <sup>17</sup> Indeed, the logic of the dividend would appear to assume full employment, or else it would equally apply to cases of high unemployment or underemployment because the same benefits could be accrued by simply employing an unemployed person or more productively employing an underemployed person. Hence, recognising the potential of the demographic dividend does not resolve the employment question but only serves to highlight the increased imperative of employment generation in the context of demographic transitions. In no way does it diminish the achievements in generating employment in the successful East Asian cases of late industrialisation.

In other words, explaining part of the economic miracle with demography amounts to potentially misattributing important interactions between two types of structural change (economic and demographic) to a causality running from the latter to the former. This causality is questionable not according to the opposite logic that economic growth causes the fertility reduction (as in a classical understanding of demographic transition), but because the so-called benefits of fertility reduction can only be capitalised in the presence of the economic miracle and the policies bringing it about. To be fair, the key seminal authors of the demographic dividend literature recognise this, in the sense that they argue that so-called 'good policies' are required in order to capitalise on the dividend. However, such good policies are then treated in a somewhat uncritical manner, more or less along the lines of the accepted fare of Washington and

<sup>16</sup> For the seminal work on this, see Higgins and Williamson (1997), Bloom and Williamson (1998), and Bloom, Canning and Sevilla (2003).

<sup>&</sup>lt;sup>17</sup> Indeed, Krugman (1994) refers to this point – ironically as a criticism of the 'East Asian miracle' and with the intention to diminish the achievements.

Post-Washington Consensus policies (such as labour market flexibility, for instance), rather than emphasising the importance that has been traditionally given to formal employment in East Asian development strategies, at least up until the East Asian crisis in 1997-98, to the extent of causing labour market rigidities, which might well have been development enhancing in retrospect, even if they might have been efficiency reducing from a firm perspective (but not an economy perspective). The point is that the recognition of a structural demographic 'dividend' in terms of reduced dependency burdens does not resolve the politicised policy questions and debates about what is required to generate growth and to employ a rapidly growing population, nor does it necessarily point to any deterministic outcome in this regard.

The employment challenges in question are, of course, monumental. A few examples serve to illustrate this point, followed by some structural considerations in order to demonstrate that the nature of the contemporary challenges faced. Demeny (2003) strikingly contrasts Russia, currently one of the most extreme cases of population shrinkage, and Yemen, one of the fastest-growing populations in the world. In 1950, Russia had a population of 102.7 million, while Yemen had a population of 4.3 million. By 2000, Russia had reached (or had fallen back to) 145.5 million, while Yemen had reached 18.3 million. Based on UN projections, which factor in as much information that we know now about demographic variables in each country, Russia's population will fall to 104 million, whereas Yemen's will reach 102 million. Even if Yemeni women were to suddenly substantially reduce their fertility soon, the bulk of this increase is more or less already guaranteed by population momentum. Similarly, as pointed out by John Cleland at a talk in The Hague in 2009, 19 the population of Niger, which recently suffered from famine and food shortage, would increase at its current total fertility rate from about 16 million in 2010 to 80 million by 2050 – a population larger than that of Germany. Even if the total fertility rate is reduced from the current eight births per woman to 3.6 - as the UN expects – the population will still reach 50 million by 2050. While Yemen and Niger are severe cases, they are not totally exceptional, as many rapidly growing countries in Sub-Saharan Africa and parts of Asia are set to experience a doubling if not trebling or more of their current populations by 2050. Correspondingly, the rate of increase in the working age population would be even faster in these cases, particularly if and when fertility does start to decline.

Structurally, the potential for agriculture to productively absorb such increases in the workforce of these countries is probably close to nil given the already over-stretched land resources in most of these countries. If anything, agriculture needs to shed labour. Moreover, food deficit countries (such as Yemen and Niger) will need to export more in order to pay for more food imports from abroad. This should not be done through the intensification of land-based primary commodity exports (such as coffee and cocoa) given that the production of these export crops takes land away from local food production, thereby offsetting the food deficit problem rather than resolving it. In other words, the foreign exchange earned through producing food for European supermarkets (minus the profits that the European corporations organising such production remit back

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<sup>&</sup>lt;sup>18</sup> [Refer to some of the work/ideas in Arrighi on the 'industrious revolution' of East Asia versus the industrial revolution in the West.]

<sup>&</sup>lt;sup>19</sup> See Fischer (2010a: 23).

to Europe) is largely used to pay for the increased food imports that these poor countries require as a result of shifting their land and labour towards such export production.

Rather, the increase in employment will most certainly need to occur in the secondary sector (manufacturing and construction) or in the tertiary sector (services, broadly speaking). And even then, in the best of scenarios, Yemen and other countries would need an outlet of international emigration; after all, during Europe's phase of rapid population growth, as much as twenty percent of its population increase emigrated to the 'New World' colonies, which had been murderously cleansed for the purpose. Emigration from developing countries today accounts for a far lesser share of their population increase than in these earlier European cases, yet these countries today face a far greater need for emigration, with far less resources to face the challenges of population increase at home.

Herein lays the contemporary dilemma. Given the capital intensity and the low degree of employment creation relative to output that is offered by contemporary manufacturing, the bulk of the employment generation mentioned above will probably need to be generated in services, largely in urban areas. In other words, with its labour force potentially increasing more than fivefold to over 50 million people, most of whom will need to employed outside agriculture, and with little employment generation in enclave sectors such as petroleum, Yemen would need to become the new Korea, or even the new China alongside a collection of other countries competing to be the same. Yet even in this case, because of the relatively low employment generation offered by contemporary manufacturing in comparison to past successful cases of late industrialisation, the burden placed on the tertiary sector to absorb rapidly increasing workforces is relatively even greater than in these past cases, in addition compounded by the fact that population growth is also faster than in these past cases.

#### 3. The Redistributive Imperative

The key question, then, is how to channel wealth generated in the primary and secondary sectors into the tertiary sector of employment, as well as prevent wealth from being siphoned out of these economies altogether. Arguably, these countries would need to institute strong redistributive mechanisms in order to guarantee that any wealth generated by the manufacturing or enclave sectors would be circulated throughout the rest of the economy in such a manner as to create decently paid and relatively 'productive' employment in the (largely urban) tertiary sector. Public-sector employment would also arguably take on a prominent role in such tertiary employment generation in part because

<sup>&</sup>lt;sup>20</sup> I qualify the use of this term 'productivity' because productivity is, in effect, almost impossible to measure across heterogeneous goods and services, particularly in the economic realm of non-tangible and non-physical tertiary sector services. Mainstream (neoclassical) economists almost always use GDP value-added in various ways as a proxy shortcut for estimating productivity at an aggregate level across heterogeneous goods (such as in measures of total factor productivity, derived from one-good Solow growth models), although this approach is severely flawed given that value-added represents a combination of output and prices/wages. Hence, 'productive' employment in the tertiary sector is as much a reflection of wage rates in that sector as any notion of output per se. Notably, the use of GDP as a shorthand for productivity leads to absurd logical implications, such as the suggestion that a barber in the US is 30 or so times more productive than a barber in India even though they both 'produce' the same number of haircuts per hour (according to the taste and expectations of their clients), simply because the wage of the barber in the US is 30 or so times higher. Indeed, this is one of the fundamental Achilles Heels of contemporary neoclassical economics.

much of redistribution happens through state channels, partly because of the important (and under-acknowledged) role of public employment in setting standards and even wage levels in an economy, and partly given the employment expectations of the increasingly well-educated populations of these countries of the Global South.

It is within this imperative for instituting strong redistributive mechanisms — which arguably becomes greater the later (and faster) the demographic transition — that the scaling up of social protection systems towards more universalistic forms of social policy, or towards a notion of 'transformative social policy' (as per UNRISD 2010), can and should play a key role. This is partly because of the central role that universalistic social policy plays in directly redistributing wealth, as well as its complementary roles in generating public sector employment or else in setting standards within employment more broadly, and also partly because of the simultaneous importance of various social policy sectors such as education and health in contributing to slowing population growth through death control (the remote determinant of fertility decline) and family planning (an important proximate determinant of fertility decline).

These roles are, in effect, demonstrated by the East Asian examples of successful late industrialisation, namely, the oft-referred to cases of South Korea and Taiwan. The means by which these countries were remarkably successful at both rapidly reducing fertility and generating employment – and, hence, profiting from the so-called 'demographic dividend' – have been generally characterized by a combination of strong developmentalism and universalistic social policies. Developmentalism in this sense means state-led industrial policy rooted in nationally owned firms, regulated capital accounts to ensure that wealth remains national, and a bias towards generating employment rather than efficiency. This is the opposite of the neoliberal dictates that demand employment austerity in the name of (transnational) firm profitability. Equally important (and often underestimated) are the variety of strongly redistributive institutional mechanisms, perhaps the strongest of which is universal social policy as a means to not only address the pressing needs of rapid population growth in areas of health, education, family planning, and so on, but also as one of the primary means of redistributing and dispersing wealth across society in a manner that synergistically generates meaningful and productive employment in tertiary service sectors – the most important and socially-beneficial of which are in health and education. Also, in should be added that both South Korea and Taiwan were supported by substantial amounts of foreign aid, in part due to important geo-political considerations. Nonetheless, these examples demonstrate that there has been a way where there was a will.

While South Korea and Taiwan are obvious examples of where such synergies of developmentalism and universalistic social policy approaches worked well, Thailand (at least, up until the East Asia crisis in 1997) and China are other interesting examples. In fact, China's success in reducing fertility in the 1970s from a rate of 5.8 in 1970 to 2.8 by 1979 – before the introduction of the one-child policy – cannot be appreciated without understanding the entirely state-collectivized economy that existed at the time. Collectivization assured full employment and the near universal provision of primary health care and basic education in both rural and urban areas, at least to a level that allowed for the rapid dissemination of new practices and socially-transformative messages. The contribution of these earlier social achievements to subsequent economic growth from the 1980s onwards is also often underappreciated.

The particular revolutionary setting of China would be near impossible, and perhaps not desirable, to reproduce in other countries today. But we can still learn from the underlying principles, shared with other less extreme cases, in terms of the ways off-farm employment was generated and supported by domestically controlled mechanisms of accumulation, wealth redistribution, and universal social service provision – all pursued from a poor agrarian economic starting point. Indeed, countries that have been best at dealing with employment impacts of population growth have generally been those that very quickly, at early stages of 'development', i.e. at early stages of transition away from agriculture and into industrialisation and urbanisation, introduced universalistic (i.e. free, integrated, state provided) health care and education to their populations. Even countries that have made good progress in their fertility transitions, such as most of Asia and Latin America, urgently require employment-focused development strategies in order to successfully tap the potential of their so-called 'demographic dividends' as well as advancements in universalistic social policy as some of the most powerful means to mediate rising or very high levels of socio-economic inequality.

#### Conclusion

Notably, in drawing from the historical examples, two important corollaries must be made. One is that, for many countries – most outside Sub-Saharan Africa – transitions to lower fertility, out of agriculture, industrialisation and urbanisation have already long begun. Hence, it might not be appropriate for these cases – such as in the Southern Cone of Latin America, which was already well in advance of South Korea in the 1950s – to draw from earlier East Asian examples, at a time when they were emerging from a largely agrarian and high population growth context. On the other hand, there is arguably an even greater precedent for the need of strong redistributive mechanisms today, in part because of the faster speed of demographic transitions occurring now than in the past, and also given that even strong forms of national developmentalism – as existed in East Asia in the 1960s and 1970s – can no longer be presumed to produce the same equalising effects via employment and local retention of value-added as they might have in the past, particularly in a very globalised setting. Hence, the principle – as first stated by Gershenkron (1962) – that the later the industrialiser, the greater the imperative to preempt and support industrialisation with the implementation of universalistic social policies, arguably holds more than ever today.

As a last point, well functioning social policy systems can also play a complementary role in reducing population growth through non-coercive and right-respecting means. In other words, there is an emerging consensus in the field of family planning today that no inherent contradiction needs to exist between family planning and population policy on one hand, and rights-based approaches on the other. For instance, as argued by Tim Dyson (see Fischer 2010b), all the evidence shows that – given a real choice, a little time, and an underlying condition of sustained reductions in mortality (particularly infant, child and maternal mortality) – women (even poor and illiterate women) generally choose to reduce (or at least regulate) their fertility. Hence, the means harmonise with the ends; choice-based approaches to family planning might well be the best way to bring down fertility, provided that they are grounded within broad-based and equitable systems of health and other social service provisioning. While this will obviously not resolve the poverty of such women outside wider developmental

considerations, as discussed above, broad-based and equitable social service provisioning needs to play a central role in any developmental strategy to reduce poverty.

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