

COVID-19, the Russo-Ukrainian War, the global sustainable development project and post-crises demography

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Abstract

The global sustainable development project as currently conceived is foundering, and the twin crises of the COVID-19 pandemic and the Russo-Ukrainian War have driven a stake through its heart. Some of the reasons for this failure are fundamental design flaws, while others are practical. The resources to bring the project – or its successor, and any other global sustainable development project of similar design and ambition that might emerge – to a successful conclusion do not exist, and never did. What lessons are we learning, and how can they inform post-2030 sustainable development goals? In this essay, the effects of the catastrophes of the COVID-19 pandemic and the Russian invasion of Ukraine on the global sustainable development project are enumerated, SDG by SDG, with special attention being paid to the implications for demography. In closing, recommendations for reforms of the project are presented, as are some suggestions for the field of demography in the changed global context. The most concrete, feasible immediate recommendations are to make up recently lost ground, specifically in the areas of vaccination and education; and to reform the profoundly flawed international asylum and refugee system.

Keywords: sustainable development; COVID-19; Russian invasion of Ukraine; demography

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1 Introduction

The world is reeling from two nearly simultaneous generational shocks: the COVID-19 pandemic of 2020-? and the Russian invasion of Ukraine (hereafter, the Russo-Ukrainian War) of 2022-?¹ These shocks have been inflicted on a world that was already far from having reached a demographic equilibrium due to radically divergent growth rates starting around 1960. Africa, North Africa and the Middle East – the least stable, the most climate-vulnerable and the most conflict-prone regions of the world – are the dominant sources of population growth, while other regions, such as China and Europe, face population decline and stagnation.

In this essay, I discuss – with some temerity, given that we are still in an early stage of this long game – the impacts of these twin crises on the global sustainable development project and the field of demography, both directly via the immediate need for research, and indirectly through the changed context.

The direct near-term impact of the COVID-19 pandemic on demographic research is easy to estimate, since the research needed – given that, outside of the most cloistered monasteries of theory, demographic scholarship is demand-driven – can be sorted into three boxes. The *first* box contains studies on the impact of the COVID-19 pandemic on demographic parameters, with the principal dimensions being mortality, fertility and migration (more distally, urbanisation, spatial distribution, family structure, living arrangements) and the resulting age and workforce structures. The *second* box contains research on the effects of demographic parameters on the incidence and the impacts of the COVID-19 pandemic by age, sex, residence, ethnicity, household living arrangements and so on. The contents of the *third* box include studies on the impacts of the COVID-19 pandemic on demography as a research discipline; on data needs, methodological opportunities and research design more generally; but also on practical issues related to the reproduction of the field, such as effects on researchers, on graduate education, etc. The differential impacts on women and researchers in developing countries are of special concern.

Regarding the Russo-Ukrainian War, the *first* box will start to quickly fill up with studies of war-related mortality, fertility and migration (notably, the displacement and refugee dimensions, plus return migration). There will be analysis of population vulnerability and resilience, disaggregated along the usual demographic axes, but this just amounts to substituting “war” for floods, droughts and other catastrophes that were already on demography’s list. By rights, the *second* box should contain studies that examine how demographic factors contributed to the Russo-Ukrainian War, but it is hard to see a causal link. Perhaps we have one state in demographic

¹ The term Russo-Ukrainian War is not sanctioned by any international organisation, and the preferred term seems to be “Russia’s invasion of Ukraine”. With all the respect that is due to the niceties of international diplomacy, the term Russo-Ukrainian War appears to be the most accurate description of the situation, at least *ad interim*. It could be argued that said War actually began in 2014 with the annexation of Crimea.

decline choosing an opportune moment to pick off a neighbouring state in demographic decline, but no one seriously believes that this was a proximate cause of the conflict. Only somewhat more plausible is the argument that a state on the verge of broad decline (including demographic) is picking off another in order to forestall its inevitable weakening, which may also apply to China and Taiwan. There will be a need for studies of the ethno-linguistically and religiously fractured demography of the Eurasian shatterbelt (Cohen, 2013; Romaniuk and Gladun, 2015; Snyder, 2010). As for the *third* box, there is an immediate need for the field to grapple with the impact of the conflict on the illustrious Russian and Ukrainian research establishments.

These are all direct effects. But more broadly, the COVID-19 pandemic and the Russo-Ukrainian War will change the global context that presents demography with the broad range of issues that need to be addressed. So, to consider the problems that will be assuming greater prominence, we need to look at the global sustainable development project as a whole, and the impacts the twin crises are likely to have on it. The motivating observation is that a very large chunk of demography, or at least of policy-relevant applied demography (which accounts for a good nine-tenths of the whole), now resides in either the core or the near periphery of that project.

2 The global sustainable development project: Origins and evolution

The global development project was jury-rigged in the early 1950s on the war-shattered rubble of the Western imperial project. As originally conceived, the development project was an enlightened effort to enrich (the bright side), albeit with an undertow of subalternity (the dark side; Said [1978] is still the most scathing spokesman for this view), what Sauvy (1952) called the Third World, now better referred to as the Global South. Globalisation, which had been rudely interrupted in the inter-war period, recovered and picked up to a trot in the 1960s with Eurolending, or the extension of hard currency credit to soft currency countries; i.e., to countries that were borrowing outside their monetary orbit. Globalisation sped to a canter in the 1970s, when the oil crisis generated enormous hard currency wealth in countries that could not put anywhere near all of it to good domestic use (“absorb” is the term of art), and that did not have enough mattresses to stuff it into. At the same time, the oil crisis produced enormous hard currency demand in the countries that needed it, and enormous profits for the banks that moved it (“recycled” is the term of art) from North to South. The Washington Consensus – a set of policies that promoted monetary and fiscal discipline, combined with regulatory reform and trade liberalisation – was born, and performed well in macro-economic terms, but with a great deal of collateral damage for the poor, particularly when the Eurolending bubble predictably burst in the early 1980s (the so-called LDC Debt Crisis). By

then, as fax and, eventually, email and the internet replaced the telex, globalisation *redux* had broken into an undisciplined (i.e., unregulated), old-time Western shoot 'em up gallop. Information became nearly instantaneous, placing those who had the skill and the capital to exploit it at an overwhelming advantage over those who did not.

Outrage over inequalities contributed to a sense of grievance in the South and guilt in the North. The two themes that increasingly infused the development project were equity and global public goods (notably the climate). Us-versus-them rhetoric (the Population Bomb, the Communist Threat, the Immigrant Peril) was replaced by We-are-all-in-this-together rhetoric, as crystallised in the title of the 1987 Brundtland Report, *Our Common Future*. The concept of sustainable development emerged from that report: *Development that meets the needs of the present without compromising the ability of future generations to meet their own needs*. This definition, anodyne to the point of being tranquilising, was the result of a bitterly-negotiated political compromise between pro-growth (South) and pro-environment (North) forces.

It is important to make a distinction between sustainability as a concept, which long predated Brundtland, and the sustainable development project as a means of implementing and achieving what Brundtland defined it as being. Some approaches to sustainability are linear and Gothic. For example, if a piece of capital, whether natural (renewable or non-renewable; physical or biological), man-made, human or financial, produces an annual scarcity rent, and that rent, but not a penny more, is translated into consumption, then the flow of consumption benefits will continue (up to depreciation) *ad infinitum*. Other approaches are curvaceous and Baroque, building in distribution, static (current) and dynamic (intergenerational) equity, *ditto* justice and fairness, catastrophic risk (fat risk distribution tails; guard rails), the Earth as a human life support system, etc.

Outside theology, concepts (say, God) do not have material interests until they are instrumentalised in the form of projects, whereas projects (or at least the people behind them) have interests from their inception phase, and look for concepts to advance them. The concept of sustainability, as it has evolved to serve the purposes of the Brundtland global sustainable development project, is Baroque. As a result, it suffers from weaknesses and contradictions, just like (absent a stronger and more costly foundation) a tall, non-rectangular building is shakier than a short, box-like one. It glosses over the distinction between human needs and wants (Douglas and Ney, 1998).² It requires speculative welfare comparisons that are not only

² While needs can be physiologically estimated by nutritionists, sleep experts, physiologists and experts in other walks of scientific life, wants are constructed through propaganda, advertising, the desire to keep up with the Joneses, and other aspects of Madison Avenue capitalism that attracted the criticism of the Frankfurt School.

interpersonal, but intercultural and intergenerational, as well.³ It privileges equity over growth and prudence over risk-taking, and it underestimates the potential for technological progress. It is locked into a narrow, poverty-focused “Do No Harm” and “No One Left Behind” logic. It is structurally rigid, constructing rights holders as victims and duty bearers as oppressors, absent transformative change (another term of art in the sustainable development discourse). Despite, or perhaps thanks to, these simplifications, for those actors in the global sustainable development complex that implement the project – which is no less tangible or consequential than Eisenhower’s military-industrial one – *Our Common Future* remains not only a touchstone, but a foundation myth – as if sustainability was invented in 1987,

³ Focusing on climate change, Thomas Schelling expressed the view in a lecture at the International Institute for Applied Systems Analysis (IIASA) in Vienna ca. 2000 that Northern-financed climate change mitigation is not an investment; i.e., consumption foregone today for consumption in the future by one’s self, one’s descendants or at least one’s familiars. It is, rather, an interpersonal transfer from today’s demographically small and slow-growing North to tomorrow’s immense South – whose inhabitants will, absent global catastrophe, be much less poor than they are today; who will live in a world that is technologically incomprehensible to us Northerners today; and who, regardless of any global melting-pot, will be culturally distant from us in the North today. Beckerman and Pasek (2001), while endorsing a moral obligation of the present to future generations, made short work of the concept of intergenerational rights-holders and present duty-bearers, since the presumed rights-holders do not yet exist (an issue, albeit far from one addressed by these authors, of particular relevance in the present American abortion debates). Groucho Marx demolished the flimsy idea of intergenerational rights with admirable economy: “Why should I do something for posterity? What did posterity ever do for me?” [Groucho] Marx must have been well-read, because his source was obviously Addison (1714/1853) in *The Spectator*:

Most people are of the humour of an old fellow of a college, who, when he was pressed by the society to come into something that might redound to the good of their successors, grew very peevish; ‘We are always doing’, says he, ‘something for posterity, but I would fain see posterity do something for us’.

There is also the legal issue of the Rule of Perpetuities, related to the British constitutional question of Parliamentary sovereignty – whether a present Parliament can constrain a future one, to which the conventional answer is “No.” We in the present can manage the Earth in trust for a few future generations, but eventually an interest must vest, and the Brundtland definition of sustainability smells like a rolling trust that is renewed *ad infinitum* by each generation, raising the issue of how we in the present generation can impose on generations far in the future the role of trustee for generations even further removed.

An important distinction can be made between intergenerational rights and the Demeny voting proposal (Demeny, 1986; Sanderson, 2007). Demeny voting only transfers the rights of future voters in trust to their parents. Those children already exist, and, subject to negligible mortality, will survive to voting age. People who do not exist do not have rights, weakening if not invalidating entirely the concept of intergenerational justice, and more so that of intergenerational equity, which can only derive from justice.

Cf. Barry (1997) for a vigorous opposing view of intergenerational justice.

like sexual intercourse was for Larkin in 1963.⁴ These are the 17 Commandments; and no overachievement on one can atone for backsliding on another. The global sustainable development project, which seeks to unite households, firms and governments in a mission of planetary survival, is a hegemonic one. Discouraging words are as unwelcome in it as they were in the equally hegemonic sexual liberation project of the Swinging Sixties.

3 COVID-19, Ukraine and the sustainable development goals (SDGs)

The global sustainable development project officially consists of the 17 Sustainable Development Goals (SDGs), to which almost every nation in the world is legally committed.⁵

⁴

Up to then there'd only been
 A sort of bargaining,
 A wrangle for the ring,
 [. . .].
 Then all at once the quarrel sank:
 Everyone felt the same,
 And every life became
 A brilliant breaking of the bank,
 A quite unlosable game.

Annus Mirabilis (1967, published in Larkin, 1974).

⁵ It is important to appreciate the political economy of the transition to the SDGs from the previous Millennium Goals (MDGs), adopted with the strong support of U.S. President George W. Bush at the Monterrey Summit of 2000, and with a target date of 2015. The MDGs were (fairly) accused of being preachy, paternalistic and instructing Southern signatories *à la baguette* on their shortcomings. In the negotiations leading up to the succeeding SDGs, the South (sullen) and its allies in the North (sheepish) agreed that the SDGs would be sufficiently broad and ambitious that all parties, North and South alike, would receive their fair share of abuse for the inevitable failure to meet them. From a transactional perspective, think of the SDG contract as embedding an implicit option that the call holder (the global sustainable development complex) can exercise on the put holder (the Northern taxpayer) to obtain additional (post-SDG) resources when the project fails. The SDGs were far from universally acclaimed: Easterly (2015) suggested that they should stand for Senseless, Dreamy, Garbled; and commented that only the UN could come up with a document as worthless as Agenda 2030.

The Sustainable Development Goals

- Goal 1. End poverty in all its forms everywhere.
- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- Goal 3. Ensure healthy lives and promote wellbeing for all at all ages.
- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- Goal 5. Achieve gender equality and empower all women and girls.
- Goal 6. Ensure availability and sustainable management of water and sanitation for all.
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all.
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10. Reduce inequality within and among countries.
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.
- Goal 12. Ensure sustainable consumption and production patterns.
- Goal 13. Take urgent action to combat climate change and its impacts.
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
- Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
- Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

The SDGs' target date is 2030, and while the objection might be raised that 2030 is already baked into the cake, it is safe to assume that there will be a successor to the SDGs, and a successor to the successor. A simple Google search will bring up multiple international development agency and civil society organisation analyses of the devastating impacts of the COVID-19 pandemic and the Russo-Ukrainian War, and of the specific impacts of these crises on the SDG of particular concern to each agency or organisation (e.g., child health for UNICEF, hunger for FAO and the WFP, education for UNESCO, gender for UN WOMEN, energy security for the IEA/OECD). The choir of the deserving is large, and each member tries to out-sing the other. The most common theme is "a decade lost", which is an appropriate metaphor, since the COVID-19 pandemic and the Russo-Ukrainian War hit almost

precisely 10 years after the global economy started picking itself up from the global financial crisis (2008) precipitated by the collapse of Lehman Brothers.

The most important impact of the twin crises on efforts to achieve the SDGs is that the money for the global sustainable development project is not there; in fact, it never was. To appreciate why this is the case, a basic understanding of global development finance and the political economy of moving money from North to South is required. Some readers have this knowledge; others probably do not. For those who need it, a primer on these subjects is provided in an annex. For those who do not need it, we can get straight to the question: How will the twin crises affect the likelihood that the SDGs will be achieved, and, through the changing context, demography?

This discussion of the SDGs is divided into four parts. The first subsection examines the goals related to income, food security and inequality (SDGs 1, 2 and 10), then broadens to include the emerging theme of happiness as a welfare measure. The second subsection focuses on the goals that are directly affected by the crises, particularly by the COVID-19 pandemic: i.e., those related to health, education and gender (SDGs 3, 4 and 5). The third subsection looks at sectoral goals that are indirectly affected by the crises, since they require a budget to pursue. Finally, the fourth subsection is devoted to the most intangible, but also the most important goals, because none of the others can be attained without them: Peace, Justice and Strong Institutions (SDG 16) and Partnerships for the Goals (SDG 17).

3.1 Income poverty (SDGs 1 and 10), food security (SDG 2) and happiness

As the examples of China and India show, the strongest correlate of income poverty reduction is GDP growth, particularly in the medium and the long term, when cyclical vagaries are smoothed out.⁶ Only the analysis of disaggregated data from household income and expenditure surveys (and complementary exercises, such as USAID's Demographic and Health Surveys (DHS) and UNICEF's Multiple Indicator Cluster Surveys (MICs)) emerging in the coming months and years will fully illuminate the effects of the COVID-19 pandemic and the Russo-Ukrainian War. But important issues have emerged even before we have access to empirical data for the world, and sufficient time to examine them.

Whereas the COVID-19 pandemic has had direct income effects in the form of medical costs, lost employment and income, etc.; the War's effects, outside of those on the combatant nations and the areas directly affected by the conflict, will be diffuse, and will mostly take the form of rising food and energy prices. It would be

⁶ For a historical perspective emphasising the need for economic growth, see Ravallion (2020). He is not entirely pessimistic on the prospects for improvement, but draws attention to a serious lack of coherence between "social" and "environmental" goals.

reckless to offer a comparison of the scale of these effects, but they differ starkly in terms of incidence, with the COVID-19 pandemic affecting the households experiencing cases of sickness most acutely, while the effects of the War are far broader. China is *sui generis* because of its “zero-COVID” lockdown policy, the effects of which are still emerging.

Perhaps the most important question is whether the greatest impact of the crises will be on extreme poverty, the steep reduction of which has been one of the triumphs of the last decade.⁷ The 2022 *World Development Report* estimated that the number of extremely poor people increased by 80 million in 2020 as a result of the COVID-19 pandemic, which represents a generational reversal in a world that saw the number of people in extreme poverty fall by one billion in the preceding decade. Given the importance of energy and especially of food in the budgets of the very poor, it is reasonable to assume even before the data roll in that the Russo-Ukrainian War is causing the number of people who are food- and energy-poor to rise, and not just in poor countries.

Another issue, more subtle than that of extreme poverty, is the impact of the crises on people who are close to the poverty line, and who will find it harder to climb out and easier to fall into poverty; a point that has been emphasised by Garroway and Reisen (2015). And, leaving poverty aside, a third issue – which has been the subject of human interest stories in the press, but will require much closer analysis – is the negative effects of these crises on middle-class households in all countries, through the loss of earnings and medical costs in the case of the COVID-19 pandemic, and through the loss of purchasing power in the case of the War. Poverty reductions have been only part of the development success story; the explosion of the global middle class has been equally important from a long-term structural point of view, and is a story that is not told in SDG monitoring because of its poverty and No One Left Behind orientation.

Why do we worship at the altar of income? For some time, there has been an argument that wellbeing (or happiness, or life satisfaction; we will use these interchangeably, with the understanding that they are subjective, self-assessed, and no doubt debated by psychologists) should not be reduced to income or material living conditions (which are objectively measurable).⁸ Scepticism about using national income as a welfare measure was evident at least as far back as Abramowitz (1959). In fact, it can be traced back to the ideological disputes at Lionel Robbins’ London School of Economics, where war was waged between cardinal and ordinal utility and the contribution to national welfare of a pound’s worth of milk versus a pound’s worth of whisky was disputed on the grounds that some preference rankings

⁷ The World Bank defines extreme poverty as living on less than roughly two dollars per day in purchasing power parity (PPP) terms.

⁸ A view that has even made inroads at the OECD, hardly a fount of heterodox economics (OECD, 2020).

were to be preferred to others.⁹ Easterlin (1974) found essentially no correlation between national income and happiness at the country level; a finding refuted by Stevenson and Wolfers (2008) who found a monotonic increasing relationship. Kahneman and Deaton (2010) found in the U.S. that, in a sort of Kuznets effect, emotional wellbeing peaked at a level of about USD 75,000 per year, while life satisfaction continued to increase. Wilkinson and Pickett (2009) put the threshold much lower, at about USD 25,000. In short, the evidence is mixed and inconclusive.

Casting empirics aside, in defence of the traditional approach, there is a tendency to set up a straw man GDP (or, more accurately, net national income) per capita as the ideal measure of the human condition, and then to knock it down. This has contributed to statistical embarrassments such as Gross National Happiness in Bhutan, the now-emerging corporate position of Chief Happiness Officer, and academic money spinners such as the newly introduced MA in Happiness Studies at Centenary University in New Jersey.¹⁰ While GDP per capita is a far from perfect welfare measure, those who tilt at this windmill have almost certainly not studied the UN's System of National Accounts (SNA) to appreciate the subtlety and sophistication of the GDP measure and its satellite frameworks designed to incorporate issues such as unpaid household activity with its gender and family labour components, health system accounts, and natural resources and the environment. Through the SNA, GDP is articulated into current and capital accounts, income and expenditure accounts, financial accounts, production accounts and balance sheets; all with sector/actor disaggregation and double-accounting consistency. Apart from basic sector/actor disaggregation – which is often demographic in nature – this is a feat that alternative welfare measures cannot hope to attain.

⁹ Hirschman (1984) is relevant here, because he addresses head-on the issue of competing (or shifting) preference rankings. Let A prefer (X to Y). From de Graaf's welfare economics point of view (see below), all is done and dusted. Concentrating on shifts in rankings, let something happen so that A now prefers [(A prefers Y to X) to (A prefers X to Y)]. Hirschman points us towards a critical assessment of the current phenomenon of "wokeness", a condition of the tolerably well-off, and Huntington's concept, discussed in the annex, of the "Davos Man".

¹⁰ The mother of all GDP per capita alternatives is the Human Development Index (HDI), originally a weighted average of GDP per capita, life expectancy and literacy; now refined by more modifications than it would be possible to count on both hands. The importance of health, education, literacy and other reasonably objective indicators as useful and necessary complements to income is universally accepted. However, the political economy of the HDI's origins in the late 1980s is revealing. At the time, UNDP was looking to make its upstart annual *Human Development Report* a credible competitor with the World Bank's flourishing *World Development Report*, which reflected the liberal Washington Consensus. Not long after the introduction of the HDI, Kelley (1991) observed that HDI and GDP per capita were almost perfectly correlated. It would be difficult to overestimate the subjectivity of how the HDI components are weighted, however, many are added, whatever the averaging method used. In its 20th Human Development Report, UNDP greatly reduced its implicit weight on longevity in poor countries relative to rich ones, and raised the value of schooling to many times its economic returns (Ravallion, 2012).

American jazz pianist Thomas (“Fats”) Fats Waller (1904–1943) may have boiled this issue down the best with the common-sense observation: “I never knew a situation so bad where having more money made it any worse”. With the important qualification that the public slice of the pie is spent to promote the welfare of the people, GDP per capita can be considered a lens through which happiness is refracted; darkly, as St. Paul put it (1 Corinthians 13:12), but without too much distortion. At the macro level, the obvious exception to GDP as a national welfare measure is in resource-rich (usually extractive) economies. Economic accounting for natural resource exploitation is not only complicated, but in most of these countries, the repartition of its proceeds is opaque and inequitable for reasons related to the political economy, not to the SNA. Apart from special cases such as these, the statistical correlation between income and happiness tends to be pretty close, at least at the macro level – absent the unlikely eventuality that widespread satiation or boredom sets in.

At the same time, it is beyond debate and in need of no empirical investigation that strict welfare economics in the style of de Graaff (1957), while aesthetically appealing for its parsimony and rigour, requires supplementation to maintain practical policy relevance, not to mention a stiff dose of political economy and social choice theory to deconstruct the social welfare function. De Graaff exhausted the space offered by neoclassical welfare economics –there was nothing but footnotes to add after that admirably slim volume was published. In favour of broader approaches, psychologists and social welfare experts credibly warn of cohorts that will bear the scars of COVID-19-associated depression for years or even decades. For those, mostly in the Anglosphere, who have dutifully accumulated financial asset portfolios to achieve a comfortable retirement, the emotional scars of today’s bear market will not be healed quickly. And perhaps, as any event that disturbs global geostrategic confidence would, Russia’s invasion of Ukraine is leading to widespread anomie of the original Durkheimian variety in which the old rules do not make sense anymore; in which millions are left shaking their heads and asking themselves, “Who’d a thunk it?”¹¹ Fats Waller aside, cash transfers cannot address the depression of COVID-19- and Ukraine-related isolation, uncertainty and anomie.¹²

3.2 Reduced inequalities (SDG 10) and happiness (again)

The COVID-19 pandemic has worsened inequality because the poor are more vulnerable to its effects than the rich. The War is causing food and energy prices to rise, which, in accordance with Engel’s Law, take up a disproportionate share of the household budgets of the lower income deciles of the population. English

¹¹ A question that occurs in Salinger’s (1961) *Franny and Zooey*.

¹² And may, at least according to the Editorial Board of *The Wall Street Journal*, make things worse: <https://www.wsj.com/articles/the-high-cost-of-free-money-harvard-exeter-study-stimulus-handout-low-income-well-being-health-personal-agency-poverty-covid-11658166372?page=1>.

grain prices did not regain their post-Black Death levels until the superimposed commodities crises of the Napoleonic Wars and the Year Without a Summer (1815). Without meaning to imply that the COVID-19 pandemic and the War, even taken together, are of a scale comparable to that earlier pandemic catastrophe, there are newspaper reports that prices are rising day by day, and that there is hunger among the poor. The prices of milk and bread in the UK have skyrocketed, and it is rumoured that the Germans may soon be limited to lukewarm, perhaps even cold, showers. Northern governments have the fiscal room and borrowing power (albeit limited by current macro-economic conditions) to cushion the blow to their populations, but Southern governments do not. Reports from the field, e.g., from the World Food Programme, are grim.

Inequality must be approached the way Graham Greene approached love in his novels, with a sliver of ice in the heart. At the global level, growth for all is practically assured by, if nothing else, advancing technology and productivity gains. The growth advantage associated with raising income levels in today's poor countries to the income levels in tomorrow's rich countries – and thus to close the gap, the goal of the global sustainable development complex – is unattainable absent hallucinatory, efficiency-insulting, forced and deeply resented reallocations of financial resources.¹³ But, inequality, which was always certain to persist, will now be worse thanks to the COVID-19 pandemic and the War.

The relationship between inequality and wellbeing has been studied most in the area of public health, where it is possible to escape a reliance on self-assessed wellbeing by statistically examining the relationship between inequality

¹³ *For ye have the poor always with you* (Matthew 26:11). Matthew lived at a time of no long-term economic growth, and with no prospect or even concept of it. The modern paradox is that the poor will not always be poor, or at least in misery, which brings us to the inequality issue. Let North start at 100 and South at 50. Let both grow at two per cent per year (which flies in the face of the historical Southern growth advantage, but we err on the pessimistic side). Then, a half-century hence, the relative income gap will remain unchanged at 100 per cent, but the South will be 35 per cent better off than the North was at the starting place. For the global sustainable development community, the question never effectively addressed is that of comparators. The issue is one of relative versus absolute welfare, and, as is discussed in the next paragraph, the future poor and rich may be as unhappy as they ever were, whatever their income growth paths.

Ausubel (2004) has made a more subtle case for persistent inequality based on the argument that success (whether at the individual or the national level) depends on a discrete sequence of good outcomes, like repeatedly making a winning cast of the dice at Step A, Step B, etc., through, he reckons, eight steps – a statistically rare event, unless (moving well beyond Ausubel) the dice are loaded, which would be the Marxist argument, and deserves to be taken seriously. But say the loaded dice are discovered and the party who loaded them is exposed. A fair set of dice are substituted. In this event, the bottom does not rise to the top; the two rather meet somewhere in between, just where is to be determined by a combination of neoclassical efficiency and political economy, both of which are likely to favour the party who loaded the dice in the first place. “Fairness”, in other words, is not an absolute, but a socially and politically constructed concept that invariably reflects comparative advantage and power relations.

and mortality and morbidity statistics – that is, by using welfare measures that are still not perfect, but are as objective as we are likely to find.¹⁴ Consider a society of rich and poor people, each with a baseline level of happiness or wellbeing. Each experiences an instantaneous equi-proportional boost in income – manna from heaven. A plausible result is that each experiences an equi-proportional increase in happiness. But, as plausible as that scenario may appear since relative inequality remains the same, neither experiences such a happiness boost; they are as miserable as they ever were once the euphoria of money illusion wanes. Now let the rich get richer while the income levels of the poor remain the same; that is, the manna rains harder on the wrong, from a social welfare point of view, side of tracks. A plausible result is that the rich then get happier, while the poor remain equally unhappy, or become less happy on account of the widening gap. But what if the rich lose happiness (or their gain is smaller than might be expected) because they perceive the worsening inequality (preference rankings being fixed), or (if preference rankings are plastic) they become more tender-hearted through a process of moral improvement that might accompany an increase in income? Now, let the rich be materially stuck while the poor get richer; that is, the manna rains on the socially correct side of the tracks. Do the rich lose happiness because they have lost privilege, or do they gain happiness because their guilt is diminished? These arguments, as static as they are, are not simple to resolve.

3.3 The SDGs directly affected: Health (SDG 3), education (SDG 4) and gender (SDG 5)

The impact of Russia's invasion of Ukraine on health, education and gender is no different from that of any brutal conflict: it has led to the destruction of infrastructure; the disruption of lives; the horror of rape and torture in a time of war. Yet it must be remembered that in no war in living memory has it been so easy for the affected populations to escape to sympathetic neighbouring states. There is no such escape from COVID-19, and it is the pandemic, with its focused impacts, that is the major concern in this subsection.

Good Health and Wellbeing. The most dramatic near-term direct impact of COVID-19 is on health, and a large body of health-related demographic research will be produced in response to the pandemic. Calculations of the impacts of COVID-19 on life expectancy and years of healthy life lost abound, and let us leave the estimation of these indicators to specialists. As the world recovers, a much simpler and more consequential question is whether developing country health policy, which was evolving in the direction of dealing with non-infectious

¹⁴ Not that the escape is complete. Self-assessed health is still widely used in surveys. A well-known bias is that affluent and well-educated respondents are better able than poor respondents to realise the dire state they are in, and are more willing to report it.

(non-communicable) disease, is forced to return, in defiance of the epidemiological transition, to dealing with infectious (communicable) disease.

Since the publication of the WHO's annual *World Health Report* of 2000, the party line of the public health establishment has been that health policy should concentrate on a broad strengthening of the health system with a primary health care orientation, and not on specific diseases (malaria, HIV-AIDS), conditions (disability) or populations (mothers and children, adolescents). With their need for publicity material and photo opps, international health donors have, for the most part, not succeeded in adopting this approach (the EU, which provides sector-wide health budget support, and the World Bank, which supports health system finance reform, are praiseworthy exceptions). During the COVID-19 pandemic, when even the meagre supply of donor-provided vaccine doses were often discarded because they could not be administered before they became outdated, the weakness of poor country health systems has been exposed.

Because they feed the news cycle's hunger for viewer-captivating human interest stories, reports of the worldwide impact of the pandemic on health care workers, and especially stories of staff burnout, have received substantial public attention. These reports have focused not just on physicians and nurses, but also on hospital cleaners, mortuary attendants and grave diggers. Elder-care facilities in the North have, in particular, lost staff, in part because the COVID-19 pandemic has disrupted immigration. In developing countries, health sector brain and skills drain will worsen as wealthy countries seek to replace lost human resources by facilitating medical immigration and certification, which will, in turn, lead to predictable political debates, as Northern medical professional associations argue that better pay and working conditions, not immigration, are the answer.¹⁵

Two other aspects of the pandemic deserve particular attention. The impact of long COVID on labour markets and health systems is unknown, because our clinical understanding of the condition and its treatment is still rudimentary. Suffice it to say that the direct, indirect and induced costs could be staggering. Other, even greater forms of collateral damage caused by the COVID-19 pandemic include reductions in basic child vaccination rates (largely DPT3 and measles), overstretched public health systems, reduced access to clinics and schools, increased difficulties in getting children to clinics, and the rampant spread of anti-vaccination misinformation. Some public health experts speak not of a decade, but of three decades of progress in combatting childhood disease being lost.¹⁶

Quality Education. The second-most directly affected sector is education. Having tracked the beneficial effects of education as it has expanded in poor countries,

¹⁵ Some years back, this argument from the British Association of Nurses and the Royal College of Nurses quashed plans for a Commonwealth nurse circular migration and training scheme. Sadly, in response to the pandemic, there has been a flood of nurse immigration from Zimbabwe, one of the African countries that has been worst affected and least able to cope.

¹⁶ <https://www.nytimes.com/2022/07/14/health/childhood-vaccination-rates-decline.html?searchResultPosition=2>

we will now have to track the losses incurred as the cohorts who were of school ages during the COVID-19 pandemic grow older. The digital divide is a yawning gap, especially in low-income settings. Remote education, at all levels and in all material settings, is an imperfect substitute for the real thing, not only because remote pedagogy is not as effective as in-person learning, but also because it implies a lack of person-to-person interactions and group socialisation. Data from the U.S. already indicate that among primary school students, literacy and numeracy levels have slipped relative to pre-lockdown levels, with very young children and Black and Hispanic students suffering the worst effects. Notch effects in cognitive skills and in personality traits will be discernible for decades to come in all countries, and not just among the children of the poor. In developing countries, it is likely that the negative effects of the pandemic on education will be especially acute for secondary education, which is expensive both in budgetary terms and in terms of the loss of potential household labour income. This is a bitter blow, given that research points to the critical importance of education beyond the primary level. Among teachers in the U.S., a lack of job satisfaction with remote instruction and low teacher salaries in a tight and skills-short job market are leading to an exodus from the profession that is as serious as the exodus from the health care sector, leaving school systems scrambling to hire often inferior replacements. Frustration with parental interference in what can and cannot be taught – a consequence of the identitarian politics of the culture wars – has accelerated the exodus.

Gender Equality and Women's Empowerment. There is anecdotal but very credible evidence that the stress of the COVID-19 pandemic and confinement at home have led to an increase in levels of interpersonal violence worldwide, including intimate partner, gender-based and other forms of domestic violence (including violence against children and among siblings). This trend is plausible, but is hard to document because social distancing made it more difficult to report mistreatment to the authorities, to community civil society organisations, or even to friends and relatives.¹⁷ How lasting this effect will be is difficult to assess. The impacts of the pandemic on female education and labour market participation are easier to document, and will be long-lasting. There is considerable evidence from the 1997 Asian financial crisis and similar events that when household finances are under pressure, it is girls who are pulled out of school first to take on family work duties, whether in the house or in the field. Girls are also the first to see their share of the family food budget cut, as the intrafamily comparative advantage shifts from brains to brawn. In the worst cases, girls are attracted to or are forced into the less savoury parts of the dollar economy.

In upper- and upper-middle-income countries, female labour force participation (and participation in university and post-graduate higher education) has declined as women have taken on more home production responsibilities, especially child

¹⁷ Anderberg et al. (2022) used internet searches to estimate a post-pandemic increase in the prevalence of domestic violence several times larger than police reports would indicate.

care, as in-person schooling has been replaced with remote instruction. The situation has been acute in the United States, where the commercial child care industry has shrunk, and there is no public alternative. Some of these changes will be unwound, but some will persist. Women have been especially affected because of their over-representation in service industries (retail and hospitality, for instance).¹⁸ An optimistic view expressed by Goldin (2022) is that remote work will offer excellent opportunities to middle-class women who want to have a flexible schedule and to engage in stay-at-home multi-tasking. This will be of cold comfort to the woman behind the supermarket checkout counter. It is, moreover, equally possible that remote work will reinforce, not break, the glass ceiling; and that it will strengthen the walls of the pink-collar ghetto made up of women working in back-office departments, such as human resources, bookkeeping, IT and payroll. Only time will tell whether there has been any lasting gender re-balancing of home production, a research area that has attracted increasing interest from demographers in recent years, both because of the increasing availability of time-use data, and because the gender balance of the profession itself has shifted.

3.4 The SDGs less directly affected

While some of the effects of the COVID-19 pandemic and the War are direct, many are indirect, and are mediated through insufficient budgets. Thus, the fiscal space for a transformative agenda has shrunk.

Clean Water and Sanitation, Affordable and Clean Energy, Climate Action, Life on Land, Life below Water, Responsible Consumption and Production. There will be less money for Clean Water and Sanitation (SDG 6), although a beneficial effect of the COVID-19 pandemic has been to draw attention to the lack of basic water and sanitation infrastructure in many low-income country health facilities. Similarly, there will be less funding for the biodiversity goals associated with SDGs 14 and 15 (Life on Land and Life below Water). When it comes to SDG 12, Responsible Consumption and Production, public economic policy in response to the COVID-19 pandemic has concentrated on sustaining existing consumption patterns. While this approach is sensible in the near term, it runs the risk of entrenching consumption habits that could prove unsustainable over the long term.

¹⁸ But this may work in women's favour, as well, due to productivity growth spurred by the pandemic. Baumol's Law was born of the observation that because there is limited scope for productivity growth in services (it will always take 20 minutes for a barber to cut a head of hair or a hotel cleaner to make up a room), the relative wages of those who provide services must rise relative to those who provide goods. This is because those who employ them must compete with the wages of non-service providers as the latter's productivity rises. Baumol's Law might have positive gender equality effects at present because those benefitting would be disproportionately low-wage workers whose physical presence is required, and who are disproportionately women. But a counterargument is that technological change – automatic supermarket checkout counters, artificial intelligence-governed online systems, etc. – may weaken Baumol benefits for service workers.

The fiscal impact of the War on SDGs 7 (Affordable and Clean Energy) and 13 (Climate Action) will be especially severe. As a direct result of the War, the EU has been forced to drastically scale back the energy and climate change commitments that were the centrepiece of the von der Leyen presidency. As Germany's sudden nostalgia for coal and nuclear energy demonstrate, commitments to achieving net zero carbon emissions by 2050, the circular economy, etc. – in short, the entire European Green Deal – have been revealed as the empty promises that they always were. De-carbonisation has been replaced by re-carbonisation. Frightening as the thought of the global long-term consequences may be (we are already reaping the near-term consequences), the War on Carbon has been put on pause.

Sustainable Cities. SDG 11 (Sustainable Cities) has also been put on hold, although it will be interesting to see whether the brutal pandemic-related acceleration of the long-term trend towards population de-concentration in middle- and upper-income countries will persist. The principal issue is the impact of the COVID-19 pandemic on agglomeration economies via the remote work revolution; which, however, predated the pandemic, and was only accelerated by it.¹⁹ As the transfer of call centres to remote locations indicates, services have always been footloose. In New York City, the *classe dorée* fled at the first sign of crisis to their stately Hamptons pleasure domes, though it appears that they are returning as the city's cultural life and night life revive. The Manhattan real estate market has bounced back smartly, as have rents overall, and the concert halls are filling, even if they are still not full. Beyond the New York elite, the COVID-19 pandemic encouraged the American middle class to move to suburbs in order to slide down Alonso's (1964) bid-rent curve; or to the outer boroughs of New York City; or to secondary cities; or even to rural areas if they wished to escape urban burnout, like Umbricius moving from Rome to Cumae in Juvenal's *Third Satire*, or the ageing William Burroughs moving from the Lower East Side to Kansas. Preliminary results for 2020 from U.S. Census Bureau show a continuation of the exodus from blue states to red states, especially to Texas and Florida; the *Wall Street Journal* has attributed this trend to high blue state taxes, as would be expected. More recently, it has been confirmed that large U.S. counties are losing population to medium and small counties.²⁰ In France,

¹⁹ More precisely, agglomeration economies of two types. The first ("localisation economies") arise from propinquity of firms (e.g., the Diamond District in New York City, or Silicon Valley in California) and of persons within firms; hence (at least pre-pandemic) the trading floor, the newsroom and the birth of the open cubicle-based office. The second ("urbanisation economies") arise from city scale; the agglomeration of multiple industries and diverse functions, all requiring services. A speculation is that localisation economies will remain strong, as relationships are formed over drinks and deals are done over lunch, not Zoom or Teams. Urbanisation economies, by contrast, are likely to be decreasingly relevant, particularly since many primate cities are already well into decreasing-returns territory due to congestion, pollution, social pathologies associated with overcrowding, exposure to catastrophic risk, etc.

²⁰ <https://www.census.gov/newsroom/press-releases/2022/population-estimates-counties-decrease.html>.

there has been an exodus of the young, creative and Linked-In workers from Paris to Marseilles (a distinctly secondary city from the Parisian perspective), and even to once-dying villages. Through CNN reporting and the internet, news of the one-euro houses being offered in villages in Italy has gone viral. It is not just a matter of remote work. Increasing mobility and connectivity, and technological changes that provide near-global access to everything from movies and music to medical consultation, mean that, apart from the psychic costs of physical distance from one's familiars and home culture, it no longer matters very much where you live. Moreover, the press is filled with reports of bourgeois bohemians ("bobos"; e.g., lawyers, accountants, web designers, IT specialists, life and fitness coaches, etc.) re-evaluating their work-life balance.

Perhaps American Midwestern realism and European Christian pastoral poetry will eventually stage a comeback, but this author doubts it. Country life is a luxury of the well-to-do that has been skewered by sources as diverse as the classic 1960s American television situation comedy *Green Acres* and the *Communist Manifesto* (para. 28, the idiocy of rural life).²¹ History moves from rural to urban, not the other way around. A dark side of the COVID-19 pandemic in India is a reversal of the Lewis model, as urban workers have returned to lower-productivity work in the village. Only the iron fist of the state has prevented a return to the countryside in China, while in Vietnam, workers were confined in factory compounds during the early days of the pandemic to prevent them from returning to their villages. During the depths of the LDC Debt Crisis, there was a re-ruralisation of African life, both via city dwellers returning to the villages and the flourishing of urban small-plot agriculture. After the 1998 currency crisis, there was hardly a Russian liberal professional who was not digging potatoes, onions, carrots and cucumbers out at the *dacha*.

Decent Work and Economic Growth. Some of the effects on the Decent Work agenda (SDG 8) have just been alluded to. In all economies, but especially in developing economies, what will be most important are the effects of the pandemic and the War-related price shocks on informality. During the COVID-19 pandemic, formal employment contracts were broken (or became impossible to obtain), and families were forced to adopt survival strategies. With the rise of remote work, informality will grow in middle- and even upper-class labour markets. This shift may prompt a critical examination of the very concept of "decent work" – which, after all, emerged from an unlikely alliance between the anti-poverty lobby, representing the poor, and organised labour, representing the worker aristocracy. It will be interesting to see how the ILO, the keeper of the Decent Work flame, will react to this

²¹ This is actually a blunder by Samuel Moore, translator of the Authorized English Edition of 1888 (Draper, 1978, p. 344f.). *Idiotismus*, in the 1848 German original, has nothing to do with mental deficiency. It derives from the Greek *ιδιώτης*, meaning an unaffiliated individual, and specifically in the context of Athenian democracy, someone who lived in isolation and took no part in political life. Marx and Engels meant no insult to the countryside; they were making a reasoned observation with serious intent.

development, as antipathy to informality and self-employment (the two typically go hand-in-hand) is in its DNA. The COVID-19 pandemic has reinforced the synergy between outsourcing and digitalisation, to the benefit of developing-world workers, and to the discomfort of developed-world bobos. A simple Google search reveals that it is possible to hire a UK-trained lawyer living in Bangladesh to draft an uncomplicated contract for a fee of 50 euros an hour. Everything from legally sound boilerplate rental leases, sales contracts, pre-nuptial agreements, applications for a disability pension, etc. are available on the web for every significant jurisdiction, which is why American and English law graduates are facing the worst job market in memory. Moving to the fringe of the labour market, the pandemic has reportedly given some impetus to the anti-work (“slacker”) movement, whose foundation text is *Bonjour, paresse* (Maier, 2004).²² A current catchphrase of this trend is “quiet quitting”, which refers to staying on the job but not working very hard at it, while harbouring no illusions of advancement, or of the value of the work.

Industry, Innovation and Infrastructure. SDG 9 is related to industry, innovation and infrastructure. The twin crises of the COVID-19 pandemic and the Russo-Ukrainian War have amplified already-existing concerns about the fragility of supply chains, especially for manufactured products and components from Asia. For example, the pandemic has clearly shown the risk of over-reliance on sourcing from China, whose zero-COVID strategy is crippling industry and seizing up the wheels of trade and commerce around the globe. Meanwhile, the War has, of course, revealed that Russia and Ukraine, along with the United States, are the wheat breadbaskets of the world.

Supply shocks originate locally on the production side, and then spread globally. That is why the disruption of Ukrainian and Russian agriculture has been driving up food prices around the world. Demand shocks, by contrast, are local in impact, even if they are global in origin. Take the case of the COVID-19 pandemic, in which the spread of the virus was global, but the demand spikes took the form of peak-load local health sector crises. In New York, this led to outrage, as critically ill patients were left in hallways and cadavers were stored in refrigerator trucks. In poor countries, already threadbare health care infrastructure was similarly overwhelmed. However, no engineer, business manager or owner can deal with peak load – whether in demand for health services, transportation, electricity or snow shovels – by brute strength and spare capacity/inventory, as the opportunity costs are too important. Only a lobbyist for the medical equipment industry would suggest a massive post-pandemic expansion of intensive care capacity, much of which would likely remain idle until the next pandemic or localised catastrophic event. Adopting such a strategy

²² The pun is on Sagan’s (1954) precocious and sensational *Bonjour, tristesse*.

would be to fall into the boom-and-bust cycle captured by the cobweb model characteristic of all but subsistence farming and the extractive industries.²³

The impacts of the crises on research and innovation are depressingly predictable, as they will result in reductions in overall budgets, and will concentrate resources on the sectors most directly affected: health in the case of the COVID-19 pandemic, and defence and security (military, but also food and energy security) in the case of the War. The pandemic has already accelerated the progression towards the emergence of a digital surveillance society, and this trend is likely to continue with the Russo-Ukrainian War, which is the first major conflict to be followed with real-time remote surveillance, digital tracking, social media and an unparalleled deployment of the (mis)information weapon.

The race for a COVID-19 vaccine is a reminder that, apart from the most arcane pursuits, research in Science, Technology, Engineering and Mathematics (STEM) is ultimately driven by profit – by the off-chance of making money out of a scientific discovery. The outcome-level performance of the profit-driven global pharmaceutical industry in its response to the COVID-19 pandemic has been exemplary – and has been far superior to the performance of the policy and political establishments, who struggled to deploy the vaccines, and, more recently, struggled to deploy the treatments that were so rapidly developed. The exquisitely post-modern Science and Technology Studies community will have valuable insights into how poorly scientific advances played out in public policy and society, and will call for more participatory consultative processes to overcome distrust, for engaged post-normal science, etc. But they will have to live with the fact that the Whitecoats burst out of the laboratory crying *Eureka!* in a mere 12 months after the virus emerged – having admittedly built on preceding basic research that was largely publicly funded. Consider the dreadful shape we would be in now if it had taken an additional six months to a year – which had been widely expected – to develop vaccines. Consider, as well, how the mRNA technology behind the Pfizer and the Moderna COVID-19 vaccines may revolutionise the clinical arsenal in the coming years. The failure of efforts to achieve global vaccine equity – or, less ambitiously than that, an epidemiologically optimal global distribution of vaccinations – lie not in failures of research and innovation, but in the vacuity of partnership talk, as discussed below.

²³ Assuming COVID-19 becomes endemic, with viral mutations every year, normal influenza provides guidance. When there is a bad flu season, vaccine is scarce and the public is outraged by stock shortages and long lines. When there is a mild flu season, warehouse shelves groan under the weight of vaccine doses that no one showed up to be jabbed with. That is the “cobweb model” in a nutshell. The cobweb model is complicated but analytically comprehensible; commercial farmers have long dealt with it – they talk poor when prices are booming because they know there will be a glut on the market come the next harvest. But introduce mild random shocks, which are sure to occur as the virus mutates, and the dynamics change from complicated to complex and incomprehensible save through the application of non-analytical stochastic approaches. It is in the form of the cobweb model that complexity first tiptoed into economics (Muth, 1961).

The sustainable development community rightly calls for local solutions to local problems, but it is important to not confound invention, which emerges from research; with innovation, which allows for inventions to be disseminated and applied differently depending on the economic, social, geographic and cultural context.²⁴ The first is the domain of scientists, and to lesser extent of engineers and mathematicians; and it benefits enormously (outside of, perhaps, mathematics) from agglomeration economies, particularly those that arise from propinquity. The second is the domain of entrepreneurs, and to lesser extent of engineers and households. Somewhere in that complicated chain lie designers. And, cutting across all this complexity is the reality that we now live in an age of the scientific amateur of a kind not seen since the 17th century thanks to the information and computing revolutions that have put data and statistical analysis on every desktop. Other than promoting the sorts of scientific mobility, exchange and collaboration that are now reasonably well established, there is no pressing need to further globalise basic hard science, at least in terms of bricks-and-mortar infrastructure. What is developed in the laboratories and accelerators of the U.S., the UK or China will, if properly disseminated and applied, be fit for purpose in other countries, as well.²⁵ It is, however, important to further develop the networks and infrastructure that feed real-time data monitoring, sharing and analysis. This is especially critical in the area of the global environment.

With that caveat, there is a pressing need for internationalisation in the social and policy sciences to help us better understand how to get scientific inventions working on the ground. In public health, the COVID-19 pandemic has laid bare the challenges that poor countries face in getting vaccines into arms and pills down throats – not that the public health community did not anticipate these problems. A lack of money is the main reason why these challenges remain, although it is not the only one. To promote innovation, we need to understand the local incentives and attitudes that lie beneath the surface; i.e., at the levels where household consumers, entrepreneurs, government (including local authorities) and technology interact. That can only be accomplished through interdisciplinary social science research, and it will require the involvement of local researchers. Lessons should be learned from the global response to HIV/AIDS, a disease that is much more fraught with cultural and social issues than COVID-19 is.

²⁴ The foundational analyses are Hagerstrand (1967) on the diffusion of television in Sweden and Griliches (1957) on the diffusion of high-yielding corn varieties in the United States.

²⁵ The historical counter-example would be the Green Revolution, but there, developing countries served as case studies for the application of the emerging agronomic technologies, not as sources of the technologies themselves.

3.5 The SDGs that enable progress on all the others: Peace, Justice and Strong Institutions (SDG 16) and Partnerships for the Goals (SDG 17)

Regardless of their standing in international law, these are not so much SDGs, as narrowly defined, as they are cross-cutting themes that must be mainstreamed to achieve all of the other SDGs. While some links with demography are developed in this section, most of it describes the changed world in which demography will be situated.

Peace. While the COVID-19 pandemic did not shift the world order, Russia's invasion of Ukraine has, especially as it has led to an unlikely Russo-Chinese alliance that is a non-intervention pact in all but name. As Alain Frachon of *Le Monde* has written (19.05.2022), this realignment is likely to remain stable even if Russia falters, because it is an alliance of two nuclear powers seeking to replace the present world order with a new one that is *dirigiste* in terms of economics; is *laissez-faire* in terms of human rights; and is comfortable with the application of power through force.²⁶ David Brooks of the *New York Times* has written (08.04.2022) that globalisation, modernisation and convergence have all moved into reverse. Citing World Values Survey findings, he believes there is now a global culture war between shrinking liberal cosmopolitanism and expanding illiberal identitarianism (sometimes national, sometimes sub-national; typically ethnic, religious or linguistic in origin). Rich (2017) has described the rise of authoritarianism as a crisis of democracy.

The evidence is mounting that the world is splintering into competing blocs, with a return to a new form of bipolarity. Something approaching an anti-West *entente cordiale* with Russia has emerged in Africa, Asia (both South and East, with minor exceptions such as Korea, minus China), the Middle East and Latin America – this development is obvious in the UN General Assembly voting patterns since the start of the War. The world is turning into “The West and the Rest”, with the latter collectively sulking, despite its diversity, in resentment of the former. But “the Rest”, apart from Russia and China, will be bit players in the big show. Henry Kissinger's East-West axis of history is reasserting its primacy over the upstart North-South axis that shaped the global sustainable development paradigm.

Among the features of this shift in the geopolitical matrix to a Kissinger basis may be a return to irritating proxy conflicts. Russian influence, exercised through

²⁶ Thucydides, *History* 5.89 (Melian Dialogue): *δυνατὰ δὲ οἱ πρόχοντες πράσسونσι καὶ οἱ ἀσθενεῖς ξιγῶσιν*. In C.F. Smith's often-quoted translation for the Loeb Classical Library, “The strong do what they can, while the weak suffer what they must”. Add to this the politics of resentment: Russia's for its persistent underdevelopment and the collapse of the Soviet Union; China for its shabby treatment by the West before Mao and economic transformation.

mercenaries, is already apparent across Africa, from Libya to Mali to Burkina Faso to the Central African Republic to Mozambique (Ramani, 2022). Moreover, Russia has recently offered to provide military training and equipment to the region. What influence Russia has not recently appropriated through military support, China acquired fair and square on commercial and diplomatic terms long ago (French, 2015), or has gained through the Belt and Road Initiative by providing financing on terms that amount to debt servitude. France, whose cultural arrogance is resented, is retiring from the Sahel; and it may be doubted whether the U.S. was ever a serious player to begin with in that part of the world. With the G5 Sahel collapsing, there is a strong possibility that the entire region will become the new de facto Islamic State caliphate. Imperialism's rude good health, under Chinese and Russian management, must have Rosa Luxemburg laughing in her grave.

The issue is whether the impact of the twin crises on peace will affect the demographic research agenda. The answer is: probably not much. There is a large body of demographic literature on the consequences, though not the causes, of violent conflict, in places such as Rwanda (mortality), Iraq (marriage age), Burundi (fertility) and Nepal (net migration). As was described at the beginning of this essay, the War may add a bit to this highly focused strand of literature. The literature on the demographic causes of conflict dates back to Malthus, who observed that imperial conquest was driven not by ego, but by the need for food (one theory is that an important motive for Russia is control of Eastern Ukraine's energy resources). Thompson (1946) applied the Malthusian view to the emerging post-World War II order. Most demographers will be familiar with the Arab Spring youth bulge hypothesis: i.e., that the turmoil was fuelled by a large cohort of young people disaffected by the lack of freedom and socio-economic progress under entrenched authoritarian gerontocracies. Since population data are universally available, and there are credible conflict databases such as that maintained at Uppsala, journals of international relations, political science, peace research and the like have been filled with studies, virtually all regression-based, on how population size and structure contribute to the likelihood of either internal or cross-border violent conflict. However, few of these studies are by authors who would self-identify as demographers.

The exacerbation of poverty by the twin crises will increase the danger of conflict in areas where the renewable natural resource base is under pressure from population density, and especially in places where there is ethnic or religious diversity. The 1984 U.S. National Academy of Sciences report on population and development found no link between population and the scarcity of non-renewable resources, which are well-allocated by markets. However, the report also warned of a significant and troubling link between population and renewable resources, noting that because property rights and access to these resources are blurred, the markets for them are less efficient. The work of (e.g., Homer-Dixon, 1999) on this topic is canonical, and uses the Rwandan genocide and central African Great Lakes cauldron as the reference case.

As the International Organization for Migration (IOM) never tires of pointing out, migration is related to all of the SDGs. The role of conflict and violence in generating refugee flows (Ukraine, Afghanistan, Syria, Central America) is clear. The combination of environmental deterioration, much of it related to climate change, and population pressure is contributing to migration out of fragile areas of Africa. However, the trigger of migration is more often conflict and insecurity than drought – to which must be added a lack of local opportunities, the tantalising proximity of Europe with its dysfunctional asylum and generous social protection systems, and the effective marketing of the migrant smuggling industry (MacKellar, 2021). The same dynamics, substituting the United States as the destination, apply even more obviously to Mexico and Central America, where the environmental pressures are not as strong.

Justice. While the COVID-19 pandemic has unleashed a furious debate over the rights of the individual versus the state, the issue is really a matter of trust in institutions, which will be discussed below. Russia's invasion of Ukraine, by polarising the world into liberal and authoritarian blocs, is having a more fundamental effect, because it reinforces the global debate over what the Rule of Law, the purpose of which is to deliver justice (that much is common ground), really means. The Rule of Law concept lies in contested ideological terrain, not only outside, but in the heart of the Western project itself, in which populist authoritarianism (e.g., Poland, Hungary, Turkey) has emerged as an acceptable alternative to the Rule of Law as conceived in Brussels. Until a few years ago, when asked to provide a definition of the Rule of Law, the go-to response would have been clear: Bingham (2010), with his lucid human rights-based liberal conception. Dworkin (1986), more turgid with his emphasis on fairness, would have been a close second. The ideological fracturing of recent decades has made the situation more complicated. The Rule of Law equivalent of the Antichrist was once Nazi legal philosopher Carl Schmitt (e.g., 1932/2007), but he is enjoying a well-deserved second look now that his work has been rediscovered as essential to understanding justice in the world of Putin, Xi, Orbán and Erdogan.

The link between population and the Rule of Law has never received serious attention apart from intergenerational rights and justice equity arguments that are, as pointed out above, of dubious validity when they extend beyond a generation or two. Mainstream development researchers have found that strong property rights, good bankruptcy law, independence and impartiality of the judiciary, access to justice, absence of corruption and the like are conducive for development. There does not appear to be much of a demography hook there, except perhaps a Boserup-Simon argument that population pressure leads to virtuous innovation in the laws of property, tort, contract, etc. It is a credible line of thought – just think of enclosure. Increasing population density contributed to the development of the English common law and improved access to it, leading to a post-13th-century secular decline in interpersonal violence. Lawsuits have everywhere replaced duelling to the point of virtually extinguishing the practice outside of Western movies. The disadvantages of population sparseness are clear everywhere. Remote

and/or scattered populations across the world, from the mountains of Central Asia to the wastelands of the Sahel, face barriers in access to justice, forcing many to resort to informal or traditional institutions that dispense what English lawyers used to contemptuously call “palm-tree justice”, which was often highly unfavourable for women. But apart from these extreme settings, the judicial benefits of population density are long in the past, especially in an age when e-justice is feasible for all but highly consequential cases. And past a certain point, population size impairs, through congestion effects, the operation of the machinery of justice, even as it can burden the institutions responsible for education and health, or give rise to urban diseconomies of scale.

Strong Institutions. The COVID-19 pandemic has been a shock to public health institutions, albeit one that was long predicted (e.g., Osterholm, 2007; Smil, 2005 and many other public health experts; MacKellar, 2007). More broadly, even an analysis as neoclassically astringent as the 1984 National Academy of Science study of population and development acknowledged that political and public institutions of all kinds would find it easier to accommodate moderate population growth than growth at the high end of the spectrum. But would the health systems of low-income countries have fared better in the COVID-19 pandemic had population growth been a few tenths of a percentage point lower over recent decades? Probably, but not by much, given how large their problems unrelated to population are (*ditto*, the justice institutions discussed above).

If there is any demography-institutions-COVID-19 pandemic nexus, it lies in the damage that the pandemic has done to faith in the institution of science, and particularly in science as reflected in public policy.²⁷ Populist discontent against the administrative state if you are American, the nanny state if you are English, the *Beamtenstaat* if you are German and the *Papa-État* if you are French was already high – witness QAnon, *Querdenker* and the *gilets jaunes* – but boiled over with the COVID-19 pandemic. Science, once broadly perceived by the non-scientific public as empowering – “Better Things for Better Living ... Through Chemistry” was Dupont’s corporate slogan; the Chairman of the U.S. Atomic Energy Commission predicted in a 1954 address to the National Association of Science Writers that electricity would be “too cheap to meter” – is now instead viewed by a significant portion of that public as disempowering.

This trend must be of concern to demographers, whose duty it is to report population trends and to express opinions on their implications without fear or

²⁷ Ausubel (1999) was prescient in his discussion of the reasons to be worried about the future. One is the rejection of science and engineering. Others include a declining taste for work (*Bonjour, paresse* and quiet quitting there) and a loss of libido through the over-prescription of psychotropic drugs, both of which have been side effects of the pandemic. On the over-prescription of antidepressants for middle-aged women, see Andrea Peteron in the *Wall Street Journal* (02.04.2022), and on the current American conservative war against common selective serotonin reuptake inhibitors (SSRIs), such as Prozac, that are associated with the side effects of reduced libido and sexual function. On the declining taste for work, see Eberstadt (2016).

favour. There is need for deeper thought about the relationship between demography and Big Data, which the field has moved rapidly to exploit, and is practically synonymous with the surveillance of daily life that has been accelerated by the COVID-19 pandemic. Demographers have always been concerned about data security, and the role of demographic data in Nazi Germany has been the subject of study (Seltzer, 1998). Foucault (1976, apparently his first use of the term, in a work much more cited than read) saw population enumeration as a manifestation of what he termed biopower (*biopouvoir*) – but then power was to Foucault as Communism was to American FBI Director J. Edgar Hoover: he saw it everywhere. Nonetheless, the level of responsibility of the field to adhere to ethical standards and to communicate transparently is high.²⁸ Designing, implementing and reporting an accurate census can result in being purged or worse, as under Stalin.²⁹ The politicisation of the 2020 census in the United States was of a kind that might be expected in a banana republic. The once obscure conspiracy theory of *le Grand Remplacement* (Camus, 2011), picked up from its French origins by the American right-wing fringe, has risen through capillary action into mainstream politics and the halls of Congress.

An old saying is that the first casualty of war is truth, and, like the COVID-19 pandemic, the Russo-Ukrainian War is promoting the weaponisation of information via the internet and social media. The impact of the War on institutions is an issue that lies mostly in the domain of political scientists, and will take years to sort out. The inability of the United Nations to prevent a murderous war of aggression on Europe's doorstep weakens that institution, and demonstrates the dysfunctionality of the Security Council. Closer to the conflict, the European Union's Common Security and Defence Policy has been unable to muster even joint training and manoeuvres. The much-discussed steeling of NATO's resolve may persist, or it may not. The Council of Europe, probably the most effective human rights organisation in the world, has felt compelled to expel Russia – a bitter blow for an institution that once viewed the membership of Russia as close to a *raison d'être*. Multilateralism, which never really recovered from George W. Bush's Second Iraq War (2003–2011), is weakening further, with the major powers, China, Russia and the U.S., becoming increasingly willing to act unilaterally. The collateral damage is that international conventions – the UN Convention on the Rights of the Child; the UN Convention on the Elimination of All Forms of Discrimination Against Women; the UN Convention against Transnational Organized Crime; the Council of Europe Istanbul

²⁸ A topical example of biopower in an area of interest to demographers has to do with mobile telephones. In a number of U.S. states, legislation is currently in force or under consideration to criminally penalise abortion, or to make it subject to civil action. In such cases, a woman's mobile telephone could provide highly probative evidence in the form of GPS and menstrual period tracker app records (*Le Monde* 14.05.2022, https://www.lemonde.fr/international/article/2022/05/14/est-ce-que-mon-cycle-menstruel-est-espionne-les-americaines-s-inquietent_6126053_3210.html; *New York Times* 19.05.2022, <https://www.nytimes.com/2022/05/19/opinion/privacy-technology-data.html>).

²⁹ The names of the executed are to be found in Heran (2017).

Convention on Violence Against Women; the UN Security Council Resolution 1325 on Women, Peace and Security; the Paris Climate Accords; the European Convention on Human Rights; and many others – are increasingly scraps of paper to be signed, toasted in a spirit of bonhomie, and then ignored.

Partnership for the Goals. Partnership has both a broad and a narrow meaning in the sustainable development context. Broadly speaking, it refers to social solidarity, the “we are all in this together” philosophy of Brundtland, and the SDGs that emerged from it. More narrowly, it is a term of art that is now required in development prose at all levels, from programme and project documents up to global strategies. The partners include donors; recipient governments; implementing organisations, agencies or firms; civil society organisations; direct beneficiaries (e.g., ministry trained staff); ultimate beneficiaries (e.g., out in the village) – and, ultimately, all of us in the global village.

In the real world, partnership has a concrete meaning: namely joint and several liability in an enterprise to which all have contributed capital. That is, if the partnership fails, we all fail; worse, if you blunder, I am on the line, too. But in the global sustainable development project, partnership is a hortatory, even precatory term. Foreign aid, as Bauer (1975) bluntly put it, is a transfer from Northern taxpayers via Northern governments to Southern governments to be held in trust for the ultimate beneficiaries, with a great deal sloshing out at every stage of the bucket brigade along the way to the village (Easterly, 2006; Okun, 1975).³⁰ Partnership talk cannot sugar-coat the fact that donors are still donors, and beneficiaries are still beneficiaries; the first group are still the ones with the money and the second group are still subaltern in all but name. The two groups share some interests; others, they do not. Competing donor-beneficiary incentives cannot be papered over by substituting “cooperation” for “assistance”; and “partnership” for what is self-evidently a patron-client relationship, hierarchical, albeit with reciprocal obligations.³¹

Partnership requires solidarity, which has failed during the COVID-19 pandemic, and not only along the North-South axis. Consider how the Northern older populations, whose lives are mostly over, have been supportive of locking down and of shifting burdens onto working-age and particularly younger populations, for whom the damage is likely to linger over a much longer period of time. This is an example of an issue of intergenerational equity in the here-and-now. When it comes to international solidarity, the COVID-19 pandemic has laid bare the fact that no country, however big-hearted, will ship a single vial of vaccine abroad until its own needs have been satisfied – whatever the non-linear scientific

³⁰ Some Northern funds go directly to national civil society, but this is a miniscule slice of the cake.

³¹ It is not coincidental that DG DEVCO (Development Cooperation) in Brussels is now DG INTPA (International Partnerships). And it is ironic that “partnership” has taken over sustainability precisely when that form of business organisation has been disappearing on Wall Street – in Big Banking, Big Law, Big Accounting and Big Insurance (de-mutualisation) – because it cannot possibly mobilise the financial resources that are on offer from the capital markets.

arguments for doing so that are advanced by epidemiologists. Even when the mathematically optimal solution is to vaccinate elsewhere, and not at home, it is voter perceptions that will rule. With science scepticism at a new high, as was discussed above, there is little chance that counterintuitive optimisation solutions from computational epidemiology will be politically feasible. While the operations research journals offer learned articles examining, by means of complex dynamic optimisation models, optimal lockdown strategies, there is no evidence that these have had the slightest influence on public health policy, which has instead attuned itself to the balance of public resignation and resentment. Although international initiatives to tackle the spread of COVID-19 – such as Chinese shipments of medical equipment, the COVAX scheme for equitable global access to vaccines, and the EU's Team Europe initiative to package European COVID-19 actions together – certainly helped to mitigate the crisis, they were initially undertaken largely as publicity exercises to show that something was being done. Vaccination rates remain pathetically low in the poorest countries, converting their populations into mixing bowls for new virus variants going forward. As for Russia's invasion of Ukraine, it is difficult to see it as having any effect other than to further dispel the partnership illusion underpinning the sustainable development project.

4 What is to be done? Recommendations

This essay has had three purposes. The first has been to advance the view that the global sustainable development project is foundering in its current form, and that the twin crises of the COVID-19 pandemic and Russia's invasion of Ukraine have driven a stake through its heart. The old battle cries of equality, equity and No One Left Behind will not revive it. As was observed above, the financial means to pursue it were always insufficient, and are entirely out of reach since the pandemic and the start of the War. Moreover, the crisis of the project reflects design flaws more fundamental than a lack of wherewithal to implement it; a number of these were called out above, and do not need to be repeated here. The failure of the project to deliver Peace, Justice and Strong Institutions (SDG 16) and Partnerships for the Goals (SDG 17) has impaired, if not doomed, the achievement of the other goals. To conclude, the present global sustainable development project is unsustainable, and when its failure becomes evident, there is a risk of backlash. North and South might retreat further into mutual resentment and recriminations. The winner would be the illiberal forces seeking to impose their dystopian world order.

The second purpose has been to forestall that dystopia by providing a platform for discussing what we can learn from the death throes of the current sustainable development project, as now embedded in the SDGs, and to ask how we can do better. What have we learned, and how do we move forward? The post-SDG project, which was referred to above as the SDGs+, has already started to be discussed.

The third has been to position the scientific field that this author knows best, demography, in the context of that foundering project. The study of population

size, structure and distribution, and of its dynamics in the form of mortality, fertility and migration, will need to come to terms with the deteriorated and more complex situation in which it needs to provide policy guidance. Many of these research needs are self-evident, and can be found in the review of the SDGs above, while others may emerge from the broader analysis of the present global sustainable development project.

4.1 The global sustainability development project

What can be done to get global sustainable development back on an achievable track? To take sustainable development seriously?

- Every policy is a narrative, and every implementation of that policy is a performance. If the performance is poor, the narrative loses credibility, and, eventually, legitimacy. *The global sustainable development narrative should abandon grand, hortatory razzmatazz* in favour of goals that have a chance of being achieved – or, even if they are not achieved, of being at least practical enough that some useful lessons can be learned from the failure to realise them. The drafters of the SDGs were so tipsy on ambition that they forgot to recognise – let alone analyse and prioritise – the trade-offs. U.S. President George W. Bush reportedly said: “If everything is a priority, nothing is a priority”. Quite. The SDGs+ should not be approached as the road to a new and transformed world; instead, they should be approached as a way to alleviate the miseries of the current world as humanity limps, as it ever has and will, into an uncertain future. Tub-thumping, transformative narratives, so common in current sustainable development-speak, have a distinctly mid-20th-century vibe. *That stinks!*, wrote the critics, and the shows – notably the Nazi and the Communist productions – closed well ahead of schedule. To paraphrase Lord Salisbury: “Why should we transform? Aren’t things bad enough already?”
- Whither the wherewithal? *The mother of all revenue sources to finance Southern development is and will remain the South*, supplemented by capitalist finance from the North and, perhaps, loan-shark finance from China. “Aid” is negligible and dwarfed by migrant remittances, which are purely capitalist in origin. The stunning development success stories – France during *les Trente Glorieuses*, Germany and Austria during the *Wirtschaftswunder* years, China, Japan, Korea, Southeast Asia, India – did not borrow their way to growth; they saved their way there. (In Europe, the 1948-51 Marshall Plan provided the platform for subsequent growth, but was characterised by a degree of donor control that would be intolerable today.) The process was not pretty and had little to do with capital markets. The savings were accrued by governments, either by taxing households and firms directly; or by confiscating private savings and depositing them in the state banking system, from which technocrats could allocate the funds competently, as they did in

East Asia (or squander the funds incompetently, as they did in Africa and Latin America). Governments lacking legitimacy cannot employ either strategy, and there can be no legitimacy without the Rule of Law. *That is the secret to mobilising massive Northern private-sector funds, as is discussed in the annex.* However, donor support for the Rule of Law has always been subordinate to aid for material results, and anti-corruption has never been taken seriously as a condition for aid, the argument being that continued engagement is best in all but the most egregious cases. Without overreacting to every bagatelle, *donors need to take beneficiary legitimacy more seriously.* That means stating frankly and transparently when and why they override the Rule of Law for commercial or security interests.

- *The Washington Consensus is overdue for a degree of rehabilitation.* With apologies to Keynes, outside the least practical and the most romantic of circles (*Le Monde Diplomatique*, say), global development is impossible without a stable, market-based, reasonably free-trade environment. The mere mention of the Washington Consensus raises European blood pressure because of the widely accepted canard that the World Bank and the IMF have forced or instructed countries to fire teachers, close hospitals, subject domestic farmers and producers to ruinous competition, reduce pensions to a pittance, etc. All the Washington Consensus did was state that a globalised economy is unforgiving of attempts at inward-focused fiscal, monetary and trade autarchy – a piece of advice that has stood the test of time. If there is an irony, it is that the unfortunate consequences of the Washington Consensus arose precisely from the Bretton Woods institutions' acquiescence to the partner countries' priorities, which are the *sine qua non* of the development partnership today. Ministries of Health and Education starved while Ministries of Defence and Interior grew fat. Both the World Bank and the IMF eventually embarked on a campaign of introspection and an expansion of their in-house social sector capacity, an area in which they now excel, but it was too little, too late.
- *Some retreat from globalisation is inevitable, but let it be a strategic one, not a rout.* The response to supply shocks that trade economics recommends resembles the recipe for a dry martini: four parts diversification of foreign suppliers to a whisper of autarchy. While this does not always work in the near term, as we are now observing with the shocks originating in China and Russia/Ukraine, even these crises are unlikely to erase the comparative advantage and the long-term gains from trade. *Autarchy is not an option.* We are mutually dependent, and not necessarily in a good way. Climate change has brought this home to us. For all our environmental dedication in the North, at the end of the day, we are dependent on what China, India and Brazil are going to do.
- Hobbes has never looked better: *The world needs a Leviathan* (Rich, 2022). Today's putative Leviathan is the United Nations, whose legitimacy has weakened to the point of making the institution little more than a useful idiot to implement tasks that no else wants to undertake. While there is

no shortage of proposals for reforming the UN, the single most convincing of these is to sharply reduce veto power in the Security Council, which means *reining in the United States, China and Russia*; as well as the greatly diminished supernumeraries of France and the UK. *Ad interim*, absent a stronger Leviathan, the *existing global institutions will struggle to apply the hard-headed approaches needed. Thus, bi-lateral negotiations or alliances may be the only way forward.*

- Everyone agrees that the long-term, and ever-nearer, threat is climate change. No doubt a more controversial proposal is needed: *a strategic truce, in the form of a measured policy shift from climate change mitigation to climate change adaptation, should be declared in the long war on fossil fuels.* This is already occurring, so we might as well make it official. The current energy crisis has illustrated that lofty goals such as net carbon neutrality by 2050 are not only impractical, but are socially immiserating and politically destabilising. This does not mean abandoning the goal of transitioning to sustainable energy; instead, it requires us to recall the life lesson that sometimes, when you have dug yourself into a hole, you have to dig yourself in a little deeper in order to get out. Adaptation (greater resilience through stronger human capital, more effective social protection systems, better insurance mechanisms, better climate risk monitoring, etc.) can deliver now because it need not involve bricks and mortar; whereas mitigation does require bricks and mortar, and will take decades.
- Repairing the damage by *getting back on track in the areas of education and vaccination* is a priority so obvious that it sounds almost trivial. However, these efforts are cheap; the operational responses involved are well understood; and the gains kick in fast, over a five- or 10-year interval.
- The North's main concern when it comes to the developing world is to manage uncontrolled migration exacerbated by climate change. As climate and climate-related conflict emergencies grow, and as instability in Africa increases, another piece of low-hanging fruit is *reform of the dysfunctional international asylum and refugee system.*

4.2 The field of demography

The preceding discussion opens a rich field of issues and questions for demographers to address.

- *The direct implications of the twin crises for the demographic research programme (largely spelled out in Section 1) are modest in direct substantive terms, confirming that the discipline rests on a foundation that is sound enough for the purpose.* All can be dealt with, sector by sector, in the determinants and consequences framework introduced by the United Nations

Population Division in 1953, given that our theoretical and empirical understanding of the links between the two has expanded since then. Some issues of importance have been identified or can be inferred from Section 3 above.

- *This is not to suggest a sort of intellectual primitivism.* Multi-state demography has expanded to account not only for age, sex and rural-urban residence; but also for level of education, literacy, cognitive ability, health status, poverty status, labour force status, living arrangements, self-assessed happiness and life satisfaction, and other indicators of wellbeing. This growth on the extensive margin has enriched the relevance of demography to policy issues at every level, from local to national, to regional to global. It sharpens the relevance of the discipline to analyses of population vulnerability and resilience; two themes that will certainly figure in the SDGs+, as they do in the SDGs. It does not represent a paradigm shift of the sort that might result from a breakthrough on the intensive, presumably theoretical, margin; but none is needed at present. *What is needed more is a modelling and computational breakthrough, with data to feed it, in which age- and sex-specific dimensional vectors are endogenously linked, including lags, and, potentially, even expectations and stochastics.*
- *Demography, like all other fields, will suffer from the weakening of faith in science engendered by the COVID-19 pandemic.* This will especially affect science as filtered through government policies. A more speculative, but plausible hypothesis, is that trust in science will be reduced by the overall sense of anomie resulting from the Russo-Ukrainian War and the crumbling of a global security structure once perceived as solid in our lifetimes. A loss of faith in science will likely stimulate the spread of obscure and, perhaps worse, obscurantist predictions of demographic catastrophe, once typified by *The Limits to Growth*, and now represented by *le Grand Remplacement*. *Demography will increasingly need to counter misinformation and the appeal of baseless or deeply flawed theories and predictions disseminated through social media and the internet.*
- *There is greater need for the globalisation of the social and policy sciences than of the hard sciences.* Perusal of any major social science journal will reveal a deficit of publications from the Global South, and any editor will report that the main problem is the shortage of high-quality submissions.
- A downside of the global sustainable development project's focus on vulnerability, resilience, poverty, equity, Do No Harm, No One Left Behind, rights-based claims, and so on is that this emphasis has encouraged demography to turn away from a handful of grand narratives and towards a plethora of micro narratives at the level of the individual and the household. Data, computational power and the accompanying development of advanced quantitative methods have encouraged this approach. It has also been driven by the hunger, which is so difficult to satisfy at the macro level, for credible (i.e., positivist) causal linkages, which can often be found with the help of randomised or natural experiments. *Demography should give micro-level narratives a*

deserved interval of benign neglect, and return to the larger questions that once preoccupied it. What do demographic trends mean for global prosperity, and thus for economic growth, technological advances and innovation? What do they mean for global peace and security? What do they mean for global biogeochemical systems? Such a shift in emphasis would contribute to a policy-effective and scientifically self-reflective demography for the post-COVID-19 pandemic, post-Russo-Ukrainian War world.

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Annex

Financing the sustainable development project: (i) sources and uses and (ii) getting the money from North to South

(i) Sources and Uses

Technology and consumer tastes held constant, a business-as-usual extrapolation of current production and consumption trends spells global trouble, perhaps even catastrophe; that is (mostly) common ground. What is needed is a transition to clean energy, efficient agriculture, a circular economy, eco-friendly production and consumption, and so on; a transition to which advances in technology can and will contribute. But it also means that an enormous chunk of the global capital stock

must be replaced with more expensive gear (the sustainability edge does not come free).

In a wide-ranging survey of SDG costs published just before the COVID-19 pandemic (Vorisek and Yu, 2020), World Bank economists estimated the infrastructure-related SDG needs in the low- and middle-income countries alone to be USD 1.5–2.7 trillion per year, or 4.5–8.2 per cent of their GDP.³² The authors also cite an IMF estimate of USD 1.3 trillion per year for health and education, both forms of investment in human, rather than physical, capital. The funds to finance these investments must come from someone’s pockets, either in the North or in the South, which means that the global saving rate needs to be boosted by, say, three or four or five percentage points. But then households, governments and firms – which exhausts the set of economic agents – must tighten their collective belt.

The sources and the users of funds can be public or private, but the point is that the funds must come from somewhere and must go somewhere, respecting the tyranny of double-entry accounting. The set of feasible alternative strategies for achieving that tightening is easily enumerated in the form of three C’s. *Constraining* through regulation forces change, but the belt-tightening is achieved by the resulting increase in prices, as cheap but dirty public infrastructure, private capital stock and consumption habits are regulated down and replaced with more expensive green alternatives (compare the prices of non-organic and organic products at the supermarket). *Cajoling* boils down to moral suasion (“awareness raising” is the term of art in sustainable development circles). But, we are a fickle species, and discounting (especially of the hyperbolic variety, which dominates as the time frame gets longer) being what it is, the yield of this approach is likely to be meagre.³³

Convincing is typically achieved through incentives, the most effective of which are taxes.³⁴ There are four things that can be taxed: consumption (including sumptuary and sin taxes), income, wealth and transactions. *Consumption* taxes, which are especially needed on dirty energy, are attractive; but consumption taxes are always regressive, and particularly in impoverished settings.³⁵ *Income* taxes do

³² There is some risk that conventional infrastructure needs estimates are made assuming the centralised, top-down, “hard” approach to infrastructure that today’s development bankers apply in project finance. To some extent, this bias cannot but reflect a desire for the commercial advantage that comes from the export of current Northern technologies. But conventional bricks-and-mortar costs should be a reasonable order-of-magnitude guide.

³³ The discounting debate, brought into sharp focus by the Stern Review, essentially boils down to ethicists vs. positivists (say, Solow vs. Beckerman). The treatment of discounting in climate change that stands head and shoulders over all others comes not from economics, but from law: Weisbach and Sunstein (2009).

³⁴ Subsidies are simply taxes in mufti, because it is taxes that finance them. In practice, despite efforts to target subsidies, they are typically regressive.

³⁵ Carbon taxes hold promise (as well as cap and trade mechanisms), but such taxes are not yet applied widely, and are regressive unless offset by tax reductions in other sectors. History does not bode well for this approach.

not work because, up to second- and higher-order effects, households will demand less of the clean and the dirty in roughly equal proportions; or, more likely, will favour the cheap and the dirty over the expensive and the clean due to the income effect. Corporate income taxes (i.e., on profits) reduce firms' incentives to undertake capital investment projects, which is precisely what we wish them to do. They also, to the extent that dividends are reduced, weaken households' incentives to invest their savings in firms in return for a piece of the profit pie. This is why, at a hint of an increase in taxes, firms cloak themselves in virtue and cry investment in sustainability to the heavens – a tactic known as “greenwashing”.³⁶ It is often argued that *wealth* taxes discourage entrepreneurship, and while the OECD (2018) has found evidence for that claim to be weak, their other findings have led them to favour income over wealth taxes. A fundamental problem with wealth taxes is that they have proven very hard to implement, as it is difficult to measure wealth other than that held in publicly traded assets. But the real problem is that there is simply not enough wealth to tax – *pace* Piketty (2013) and his ilk, who have justifiable outrage on their side, but not the numbers to get from here to where they want to go. The *transaction* tax discussed the most is the Tobin tax on cross-border financial transactions, which has been repeatedly proposed as low-lying fruit. However, this is a self-defeating stamp tax in a world that depends on global economic and financial integration to respond to global challenges.³⁷

There is current enthusiasm in sustainable development circles for a Global Public Investment (GPI) fund into which all countries, not just the rich nations, would pledge to put a given (presumably graduated, not flat) share of their income earmarked for global public goods and poverty reduction, eliminating once and for all the donor-beneficiary mentality and giving the poorest countries, to use the American slang phrase, skin in the game. But this is just a return to the tithe or *zakat*, and the problems in implementing a GPI fund are daunting. In the case of

³⁶ Closely related to “greenwashing” is the massive growth in private money directed at Environmental, Social and Corporate Governance (ESG) asset funds. It has been estimated that ESG assets under management are growing 15 per cent per year, and will reach one-third of the \$140 trillion total investment assets by 2025. Following the argument that the fiduciary responsibility of asset managers is to maximise asset holders' wealth, not to promote high, vague and debatable principles, there are stiff U.S. legal challenges to the ESG movement. There is also, in the U.S., a plethora of competing and inconsistent non-financial disclosures that can result in wildly differing classifications of companies.

³⁷ It is argued that the Tobin tax can be tailored to affect only speculative transactions, but this is easier said than done. The vast majority of international transactions are in derivatives markets (mostly in credit default and interest rate swaps). They do not arise from sales and purchases of real assets, or sales and purchases of equity interests, or cash transfers. It is an iron law of financial economics that at the one end of a trade is a risk-loving (hence, buying) speculator, and at the other end is a risk-averse (hence, selling) hedger. Each is a will 'o the wisp from the standpoint of identifying who is who, and whom it is better to tax from a social welfare or moral perspective (the two being by no means always the same). Identify the speculator and tax him, and the hedger will be left searching for scarcer, more expensive cover. Identify the hedger and tax her, and the speculator will suffer the pangs of risk deficiency.

the tithe, the church (and not only the Catholic church, hence the *minuscule*) took a generous skim for management expenses; a sort of ecclesiastical *seigneurage* that has bequeathed us (in the Catholic case) the magnificent cathedrals of Europe. What are the running costs of this fund? All of the leakages discussed in the next section will apply. Who decides who gets what out of the community chest? How should voting rights be assigned? How can the board be voted out?

Tennyson observed that a young man's thoughts turn to love in spring. In a crisis, a politician's thoughts turn to borrowing, which has, since time immemorial, meant debasing the currency; a little if times are good, which they seldom are in a crisis, and a lot if they are bad, which they usually are. The strategy boils down to borrowing good money and paying back bad money; monetary history and Gresham's Law from numismatics are unequivocal on this point. This is not necessarily bad policy, because according to all sound macro-economic reasoning, in an economic crisis, you should throw money at the problem – that is, you should borrow to scrape by in the present while assuming that repaying in the future will not be as painful because the crisis will be past, growth will have intervened, and money will be cheap. From a micro-economic point of view, this is valid consumption smoothing. But do not look at the time of this writing to the *legerdemain* of creating cheap money to get us out of the COVID-19 and Ukraine crises. The global economy has been drowning in liquidity since the birth of “quantitative easing” in the wake of the financial crisis, which is conventionally dated to the collapse of Lehman Brothers in 2008, and the inflationary chickens have come home to roost. For the first time since the 1970s, it appears that central bankers will not bail the global economy out of crisis. They will need years to mop up the flood of liquidity that got us out of the COVID-19 pandemic, even as they are still dealing with the clean-up from the previous crisis. Add to this the significant possibility that the labour shortages that became evident during the COVID-19 pandemic and the higher energy prices triggered by the Russo-Ukrainian War will make current inflation structural, not transitory – this is not a universal view, but it is a credible one.³⁸

³⁸ There are two common views: the ethicist and the positivist. The *Wall Street Journal* (channeling Nicholas Eberstadt's research [2016]) frets over the decline in American work commitment, which, like comedian Danny Kaye's get-up-and-go, got up and went; and warns of high interest rates for years to come due to labour shortages. The *New York Times* (via columnist Paul Krugman) points out that food and energy prices are well off their peak, and warns of panicked, over-hawkish central bank responses.

To summarise, there is frankly not that much money out there to pursue global sustainable development without avoiding steep consumption cuts.³⁹ And, to the extent that the sources of money are mostly in the North and the users of money are mostly in the South, the following question presents itself: How do we get the money from here to there?

(ii) Getting Money From North to South

One option can be dismissed, but it raises nice issues. Sometimes explicit and sometimes implicit in sustainable development talk is a massive transfer of wealth from North to South, to be interpreted as compensation for past injustices and indignities inflicted by the North. Like John Barleycorn in the old English folk song, the idea refuses to die; but unlike little Sir John, it is unlikely to prove the strongest man at last. Although such a North-South transfer at the global level is politically doomed, it offers food for serious thought, or at least mathematical recreation. The practical challenge (disregarding the interpersonal and intergenerational welfare comparison riddle, which is insoluble) would be working out the costs and benefits of, say, colonialism – to take the major issue – in order to calculate a transfer that would neither fall short in forcing present and future generations in the North to pay recompense, nor lead to the unjust enrichment of present and future generations in the South. Other factors that must be taken into account are past and future population growth and homogenisation (migration, intermarriage and the like), and how wealth extracted from the South financed technological progress that benefitted everyone, contributed to the development of global trade and financial markets, and so on. To make matters worse, this is in the cut-and-dry world of tort; add criminality (which many activists would, in the form of a crime against humanity, and their argument is not without merit), and we are taken from compensation to reparations. The sky becomes the limit.

Returning to Earth, the global macro-economic challenge of financing the SDGs is made more daunting when the detailed process by which buckets of money are transported from North to South, is examined. U.S. General Omar Bradley said: “Amateurs talk strategy. Professionals talk logistics”.

³⁹ Which explains why the EU has, to the fury of European environmental NGOs, backpedaled on the energy component of the European Green Deal by classifying nuclear and gas as clean sources. Without them, net zero carbon would have to be achieved by energy price increases forcing consumption reductions so steep as to immiserate significant portions of the European population, with terrifying consequences for political leaders.

To achieve this finer resolution, a side excursion into data and accounting issues is required; however, this is consigned to an extended footnote.⁴⁰ Of great importance is to underscore from the outset that, when we are dealing with North-South financial flows, we are speaking of official transfers to the governments of low- and lower-middle-income countries (LICs and LMICs). But it is underappreciated by the public at large that upper-middle-income countries (UMICs) – such as Brazil, Chile, South Africa and many others – are not only ineligible for development assistance, but are donors in their own right, albeit not terribly significant ones. When countries “graduate” from LMIC to UMIC status – Vietnam, Colombia, Kazakhstan and a long list of others – they are no longer eligible for the type of support described here. In a nutshell, the countries discussed here are today’s left-behinds, explicitly privileged in the sustainable development agenda.⁴¹

The World Bank (2021) has combined OECD Development Assistance Committee Creditor Reporting System (CRS) data with data from the Bank’s own Debtor Reporting System (DRS), and the resulting financial aggregate thus calculated – Official Financial Flows, or OFF – is probably the closest we can come to estimating the Northern financing available to the South in pursuit of the SDGs. Two 800-pound gorillas – foreign direct investment (FDI, the acquisition by Northern investors of

⁴⁰ Official Development Aid (ODA) is tracked by the OECD’s Development Assistance Committee (DAC) through the Creditor Reporting System (CRS). Only funds from official sources, whether bilateral (i.e., national government agencies like U.S. AID or Swedish Sida) or multilateral (e.g., UN or World Bank or EU), to official recipients (i.e., sovereign entities) are reported. Only that component of the flow that is a concessional contribution to finance recipient-country development programmes is admissible, which can lead to debates over whether a given activity is, to use the jargon, “DACable” (<https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/What-is-ODA.pdf>). Loans are DACable so long as they contain a sufficiently high concessional element; typically an interest rate subsidy or repayment delay. Export credits are not DACable, since they serve the commercial interests of the originating country. Military aid and aid designed to strengthen the security of the donor country are not DACable. Only the least developed, low-income (of whom the least developed are a subset) and lower-middle income countries as classified by the World Bank are eligible for ODA.

The CRS covers only financial flows from the 29 country members of the DAC (with the EU counted as one member), plus DAC member funds funneled through the UN, the World Bank, the EU and the regional development banks. Left aside is the massive finance provided to official entities by China, largely in the form of loans; and the smaller but significant funds provided by Brazil and India (South Africa being a member of the DAC), the non-concessional private official financial flows, and the grants by private philanthropies, which have assumed increasing significance in some sectors such as health. Left aside as well is private financial institution lending at market rates to sovereign entities. Also missing, since the recipients are not-DAC eligible, are official flows to upper-middle-income countries. Thus, the CRS gives only a partial picture, albeit one that allows for a great deal of disaggregation by sector and other characteristics.

⁴¹ Leaving serious questions regarding the poor in the countries that have graduated. “‘Leave No One Behind’ (LNOB) is the central, transformative promise of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs)”. (<https://unsdg.un.org/2030-agenda/universal-values/leave-no-one-behind>).

equity stakes in Southern firms) and migrant remittances – are absent from the OFF room. But FDI must be financed by Northern savings (not quite, UMIC sovereign wealth funds such as Malaysia’s are significant investors), and migrant remittances must, if they are to be translated into investment, be additional to household savings in the South (i.e., they must represent an increase net of crowding out). Thus, neither omission gets us off the sources-users hook described in the previous section. Missing are flows from non-official sources, such as private philanthropical institutions, whose significance in development finance has grown in recent years, but mainly in health, education and other social sectors.

A helicopter, executive summary-level view of sustainable development finance emerges from the World Bank’s analysis of OFF in the years between the end of the global financial crisis (roughly 2010) and the onset of the COVID-19 pandemic (roughly the end of 2019). The findings do not bode well:

- The steady growth of North-South OFF between 2010 and 2019 was mostly due to private, not public, finance; that is, Northern bank lending to Southern sovereign entities and Northern investor purchases of Southern sovereign bonds, both at market-determined rates. In 2010, public flows represented nearly two-thirds of the annual total; in 2019, public and private flows were roughly equal. In 2020, they together represented about USD 300 billion (2019 prices). That amounts to perhaps a tenth of the developing-country SDG financial requirements reported above for infrastructure alone.
- As private has replaced public finance, indebtedness ratios have risen *pari passu*, and creditworthiness has declined, placing future borrowing in jeopardy.
- The share of OFF not allocated to specific countries – which essentially consists of emergency humanitarian responses, invariably in the form of grants, to provide relief for natural catastrophes and conflict situations (including support to refugees in destination countries, whether rich or poor) – has quadrupled, and now amounts to about one-fifth. In other words, OFF are increasingly devoted to firefighting, not to finance for development, as they were traditionally conceived.

In rhetoric, closing on a down note is generally inadvisable. It leaves the reader or listener disconsolate and confused, because the penultimate down begs for a concluding up. But it is difficult to find an upbeat note on which to end this section. An explosion of North-to-South public (or private) charity in the form of grants is unlikely since the North faces problems of its own. Outside the ranks of the subspecies of *Homo sapiens* that Huntington (2004) called Davos Man – the capitalists who sow the seeds of their own destruction, as Schumpeter (1942) observed – post-colonial “wokeness” with cash to back it up is hard to find, despite all efforts at awareness raising. There is justifiable suspicion that, 75 years into the development project, many of the problems of the poorest countries have been self-inflicted, or, even if they were inherited from an unfair pre-project global system,

have been unaddressed other than through enabling a privileged class to profit from them, and are now self-perpetuating.

The Global South is not worth lending to these days for the reasons discussed above, and FDI is stymied by low scores on what the World Bank terms “ease of doing business”, and the Heritage Foundation calls “economic freedom”.⁴² These institutions, at opposite ends of the ideological spectrum, share the same concerns: corruption; weak Rule of Law as it concerns corporate governance, contracts, tort and property rights; administrative red tape; and a lack of transparency and accountability overall. In the poorest countries, where the needs are the greatest, there is impatience with the inability of dubious governments to collect the taxes they are owed, and with the haemorrhage of money into another three C’s: corruption, criminal enterprise and capital flight. Outside of unsavoury sources – principally China, which is always willing to lend to gain strategic advantage – increasing private finance to the countries that are most in need of it would require drastic improvements in governance – which are precisely what China does not demand.⁴³

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⁴² Conventional wisdom is that investment in developing economies should reward investors both based on economic fundamentals (capital is scarce and labour is abundant there, the opposite of the situation in the developed world), and because myopic Northern investors overestimate the risk premium (cultural and linguistic unfamiliarity, information asymmetry, perhaps more than a pinch of racism). Alas! Over the last decade, American mid-cap stocks have outperformed emerging economy equities by a furlong, while U.S. high-yield bonds have outperformed emerging economy debt. These are roughly comparable equity and fixed-income asset classes. If anything, the combined COVID-19-Ukraine shock may lead to a significant rebalancing of global financial portfolios out of the South and into the North (see the natural interest rate comment below) – presumably with a preference for American markets because of the exposure of Europe to Russia.

⁴³ The list of borrowers from China now in distress is long, but Sri Lanka, Pakistan, Zambia and Ethiopia give an idea of the global range. The traditional venue for international debt workout is the Paris Club, which since the 1960s has operated effectively on the simple principle that when things go wrong, both borrowers and lenders must take a hit, after which they can pick themselves off the floor and get on with business. China (not a member) rejects that model, simply offering borrowers who are in trouble new loans, a technique known to the public as throwing good money after bad, but to those in finance as “evergreening” (<https://www.nytimes.com/2022/07/22/opinion/china-debt-belt-road.html>). The charitable view is that China is simply a newcomer to international finance and has yet to learn the rules of the game. Also not to be overlooked are Chinese equity interests, which are often hidden in the political and military shadows where the writ of Generally Accepted Accounting Principles (GAAP) does not apply: for example, Cambodia, Lao and Myanmar have been bought lock, stock and barrel.