

VANGUARDIA

DOSSIER

NÚMERO 69 JULIO / SEPTIEMBRE 2018

¿Cómo la demografía cambiará el mundo?

CON TEXTOS TAMBIÉN
EN VERSIÓN ORIGINAL

George W. Leeson
Walter Laqueur
Jack A. Goldstone
Vincent Barras
Hans Groth
Gérard-François Dumont
Erich Striessnig
Elizabeth Donnelly
Isabelle Attané
Samik Chowdhury
Minchung Hsu
Vladimir A. Kozlov
Christopher Wall
Youssef Courbage
Iain Begg
Lisa ten Brinke
Julio Pérez

6 EUROS



SEGUNDA PARTE

Desequilibrios demográficos

El Génesis cuenta que el abuelo de Noé fue el más longevo de los patriarcas del Antiguo Testamento. Matusalén vivió 969 años. De ahí el dicho “eres más viejo que Matusalén”. La persona verificada más longeva que haya vivido nunca es Jeanne Calment, que murió en Francia en 1997 con 122 años y 164 días. Como individuos cada vez vivimos más, y la población envejece. La demografía del siglo XX y XXI ha sido y es sobre todo una demografía del envejecimiento; y el envejecimiento de la población, que en otro tiempo se consideró un asunto de economías desarrolladas de Europa y América del Norte, es hoy un fenómeno global que está llegando a América Latina y que tiene como única excepción notable el África subsahariana (Leeson). *Vanguardia Dossier* se pregunta en esta monografía si la demografía cambiará el mundo y cómo.

Si no hay jóvenes, que trabajan, pagan impuestos, innovan y son los consumidores dinámicos del futuro, es difícil que la economía crezca. Asia, que creció gracias a su cohorte juvenil a finales del siglo XX, ve ahora cómo esa etapa concluye (Goldstone). China, que se verá obligada a replantear su modelo económico en un marco de profundas desigualdades (Attané), ya no está sola: la fecundidad se ha derrumbado en casi toda Asia, donde Japón se presenta como el país más envejecido del mundo (Hsu). India superará a China y se convertirá en el país más poblado en 2025, pero sin haber realizado una planificación adecuada para impedir que el dividendo demográfico acabe transformándose en una maldición (Chowdhury).

La franja de población comprendida entre los 15 y los 24 años de edad permanecerá estable en Estados Unidos hasta 2050, mientras que en la Unión Europea descenderá planteando muchas preguntas todavía sin respuesta clara acerca de las consecuencias económicas del envejecimiento, sobre cómo actuar ante él, cómo adaptar las políticas sociales y cómo afrontar las tensiones que generará (Begg-Ten Brinke y Dumont). Por el contrario, España vive una situación demográfica más favorable (Pérez).

La demografía del mundo árabe, que vivió su revolución con el descenso de la mortalidad y vio también cómo descendía la fecundidad, proporciona hoy señales ambiguas que pueden afectar al desarrollo de su futuro político. Ni las *primaveras árabes* del 2011 hay que darlas por muertas ni los *inviernos islamistas* parecen consagrados (Courbage). No hay ambigüedades en el África subsahariana, cuya población se duplicará en el 2050, representando una cuarta parte de la mundial. Los estados africanos se enfrentarán al triple desafío de generar un crecimiento económico acorde con su incremento demográfico, asegurar que sea inclusivo y crear empleos de calidad para que la creciente mano de obra lo siga sosteniendo (Donnelly). Su riqueza, la mano de obra joven, contrasta con la pobreza de los países desarrollados. Por eso, la cooperación internacional será fundamental para hacer frente a estos desequilibrios demográficos entre quienes necesitan hallar fórmulas para mantener la riqueza y bienestar y quienes han de crear sociedades que ofrezcan empleos y oportunidades a sus jóvenes y evitar así el malestar social (Groth-Barras).

La desestabilización puede alcanzar de lleno a América Latina en dos generaciones como consecuencia del descenso de las tasas de fecundidad y mortalidad y del aumento de la emigración (Wall). La emigración, que es el componente demográfico más incierto de todos los que contribuyen al cambio poblacional (Striessnig), se ha convertido en un factor crucial y evidente del crecimiento demográfico de Rusia (Kozlov).

La demografía del futuro preocupa, con explosión o sin ella, desde la época de Malthus (Laqueur).



ILUSTRACIONES DE PEP BOATELLA

Álex Rodríguez

América Latina 2050

La transición del Nuevo Mundo al envejecimiento

Christopher Wall

ANALISTA DE CIENCIA DE DATOS PARA GIANT OAK CORPORATION. PROFESOR DE LA ESCUELA DE INSTRUCCIÓN DE PEQUEÑAS EMBARCACIONES Y ENTRENAMIENTO TÁCTICO DE LA ARMADA DE ESTADOS UNIDOS, DONDE IMPARTE CURSOS SOBRE CONTRATERRORISMO, CONTRAINSURGENCIA Y GRAN ESTRATEGIA. COAUTOR DEL LIBRO 'THE FUTURE OF TERRORISM: ISIS, AL-QAEDA, AND THE ALT-RIGHT'.

LAS PRIMERAS DOS DÉCADAS DEL actual siglo han resultado ser uno de los períodos más estables y prósperos de la historia de América Latina. Con pocas excepciones, la gobernanza democrática se ha convertido en norma en la región, y todos los grandes conflictos han concluido o van camino de resolverse. Además, la región es más rica que nunca. A partir del 2004, el conjunto de América Latina experimentó un auge de los productos básicos que contribuyó a extender la clase media y a sacar a millones de personas de la pobreza. Los impuestos generados por dicha riqueza ayudaron a los gobiernos a aumentar las inversiones en educación y en infraestructuras orientadas a amplificar ese crecimiento en años futuros. Pero existen razones para pensar que toda América Latina podría empezar a desestabilizarse a lo largo de las dos próximas generaciones. Como consecuencia

La proporción de personas en Latinoamérica de más de 65 años pasará de un 10% en el 2010 a un 25% en 20-30 años. Atenderlos reducirá los fondos disponibles para otras inversiones necesarias

de las disminuciones de las tasas regionales de fecundidad y mortalidad, así como del aumento de la emigración, América Latina se enfrentará en el 2050 a un desafío demográfico único en el mundo. Según la ONU, en el plazo de los próximos 20-30 años, la población latinoamericana se estabilizará en torno a los 779 millones de personas. En el mismo período, la edad media en la región crecerá de 27,3 años en el 2018 a 40,6 años, y la proporción en el conjunto de la población de personas con 65 o más años pasará de un 10% en el 2010 a un estimado 25%. Con una esperanza de vida que supera los 75 años en algunos países, la prestación de servicios sociales para atender a una población de cada vez más edad consumirá una mayor cuota del PIB de la región, lo cual reducirá los fondos disponibles para otras inversiones sociales necesarias. Si no se aborda de modo proactivo en los próximos años, la transición hacia una sociedad envejecida se convertirá en una inmensa carga económica con importantes consecuencias políticas.



Por definición, una sociedad efectúa una transición a una sociedad envejecida cuando la proporción de adultos que participa en el mercado de trabajo llega a un máximo y luego decae debido al envejecimiento. Ese fenómeno se produce por una diversidad de razones. En algunos casos, el envejecimiento es provocado por la menor necesidad de trabajadores cuando una sociedad se aleja de un sistema económico intensivo en mano de obra, como la agricultura, y fomenta con ello un menor número de nacimientos. En otros casos, los adultos retrasan el tener hijos para maximizar las oportunidades profesionales, lo cual reduce el número de años para procrear. Sean cuales sean las razones, si el número medio de hijos por mujer desciende por debajo de 2,1, la sociedad se sitúa por debajo de los niveles de reposición demográfica. A largo plazo, ese tipo de transición demográfica resulta perjudicial por dos razones. En primer lugar, una población envejecida limita la capacidad económica del país al reducir el tamaño de su fuerza laboral y al incrementar la carga fiscal sobre una población activa en contracción, lo cual limita a su vez los recursos públicos para unas inversiones sociales continuadas. En segundo lugar, la norma esperada en muchos países era, hasta hace poco, que los hijos se ocuparan de los padres a medida que éstos envejecían. Eso deja de ser así cuando la proporción de hijos existentes para mantener a unos adultos mayores se reduce y la esperanza de vida de los adultos hace que muchos de ellos vean a sus propios hijos llegar a viejos. En China, por ejemplo, el desequilibrio etario es tan grave que se espera que cada hijo nacido hoy sostenga a dos adultos y cuatro abuelos. Para compensar esa inversión demográfica, muchos gobiernos han asumido la responsabilidad de hacerse cargo de los mayores por medio de programas de protección social, una iniciativa con grandes costes. Después de los niños pequeños, los adultos mayores son los más propensos a la enfermedad.

Por supuesto, el desafío no es necesariamente el proceso de envejecimiento, sino el modo en que se produce. Los economistas llaman *ventana demográfica* al momento anterior al inicio de la transición. El Banco Mundial considera que es el momento óptimo para aumentar los ahorros

sociales y hacer inversiones en los sistemas de salud y protección social, porque es teóricamente el momento de mayor productividad del país. De manejarse de modo adecuado, surgirá una situación similar a las experiencias de Europa, América del Norte y Japón. En esas sociedades, el envejecimiento es un proceso en curso desde hace al menos 50 años y, en algunos casos, incluso 70. En el esfuerzo por hacer frente a sus respectivas transiciones demográficas, esas sociedades han realizado grandes inversiones en infraestructuras para cuidar a los mayores, mejorar los servicios de salud públicos y establecer un sólido sistema de pensiones. Dichas inversiones han resultado fructíferas. En el 2017, la revista británica *The Economist* publicó que la riqueza relativa de las personas de 65 años en las sociedades ricas es ahora comparable a la de alguien con 20 años menos en el mundo en desarrollo. Además, esas sociedades también han logrado compensar la caída de la productividad económica invirtiendo en educación y tecnología (sobre todo, en automatización), un movimiento que aumenta la capacidad de los adultos y les permite trabajar superada con creces la edad de jubilación si así lo desean. En otras circunstancias, como consecuencia de políticas inmigratorias menos restrictivas, muchas de esas sociedades se han limitado a importar jóvenes del mundo en desarrollo, y eso las ha ayudado a mantener su competitividad en la escena mundial. De resultados de todo ello, los gastos en salud y protección social no han crecido de modo tan espectacular como cabría suponer en una sociedad en proceso de envejecimiento.

América Latina experimentará esa transición demográfica de modo muy diferente. La región no sólo experimenta ya esa transformación en menos tiempo, también lo está haciendo con menos recursos que la ayuden a aliviar las tensiones económicas. A pesar de que la desigualdad ha disminuido desde el año 2000, según un informe del 2015 de la Academia Nacional de Ciencia de Estados Unidos, un 78% de la riqueza de la región todavía está en manos de un 10% de la población. Eso significa que muchos de los que han hecho la transición a la clase media carecen de los ahorros necesarios con los que mantenerse en la vejez, con lo cual es muy probable que mu-

América Latina experimentará la transición demográfica hacia el envejecimiento de modo muy diferente a los países desarrollados: en menos tiempo y con menos recursos que la ayuden a aliviar las tensiones económicas

chos latinoamericanos tengan que trabajar más allá de la edad de jubilación para no caer en la pobreza. Aun así, esas condiciones mejoradas no tienen en cuenta la pobreza extrema que sigue haciendo estragos en muchas partes de Centroamérica y Sudamérica, por lo que habrá adultos sin ahorros de ningún tipo. Para algunos, tener que trabajar hasta el día de su muerte para ganarse el sustento es algo más que una posibilidad. En realidad, lo que en última instancia agudiza el problema del ahorro es que la corrupción pública es endémica en muchos países latinoamericanos y eso impide a los gobiernos mantener sistemas de bienestar potentes. Por ejemplo, en el 2015, las protestas ciudadanas estuvieron a punto de derribar el Gobierno del presidente hondureño Juan Orlando después de que algunos denunciantes revelaran que dicho Gobierno había robado millones de dólares del fondo de la seguridad social. Honduras tiene la suerte de que empezará el proceso de envejecimiento después que la media de los países latinoamericanos, pero esa merma en el fondo de la seguridad social tendrá una repercusión negativa en muchos mayores del país si no se repone pronto.

El envejecimiento demográfico es un problema en sí mismo. Por desgracia para América Latina, su transición demográfica se produce en el marco de la crisis más amplia de la salud pública planteada por el cambio climático. Como explican los investigadores del Centro para el Control de Enfermedades de Estados Unidos, el calentamiento climático aumentará la tasa de transmisión de enfermedades infecciosas, puesto que más partes del planeta se volverán receptivas a bacterias y virus peligrosos. Las personas mayores, con un sistema inmune debilitado, presentarán un riesgo incrementado a la infección, con lo que aumentarán su tasa de hospitalización y los fondos necesarios para tratarlos. Además, el elevado grado de urbanización hace que América Latina sea particularmente sensible a la difusión de las enfermedades, dado que un 80% de la población vive en ciudades. Si bien algunas como Santiago o Montevideo presumen de sistemas públicos de salud modernos, muchos países latinoamericanos tienen inmensos suburbios urbanos donde los sistemas eficaces de suministro de agua potable

y de alcantarillado son un lujo, una situación que tiende a amplificar la tasa de contagio de las enfermedades. En el 2015-2016, por ejemplo, el mundo vio cómo Brasil luchaba por frenar la expansión del virus del Zika. Dicho virus, transportado por mosquitos, encontró un entorno favorable en las favelas de Río de Janeiro y São Paulo. Antes de que los funcionarios regionales fueran capaces de contenerlo, se calcula que unos 116 millones de latinoamericanos se vieron expuestos al Zika y son muchos los que hoy padecen trastornos neurológicos a largo plazo como consecuencia de la infección. No cabe duda de que la mayor probabilidad de difusión de enfermedades en el siglo XXI limitará aun más los recursos disponibles para ayudar a los mayores.

El calentamiento climático aumentará la tasa de transmisión de enfermedades infecciosas, ya que más partes del planeta se volverán receptivas a bacterias y virus peligrosos. Los mayores presentarán mayor riesgo de infección

Sin dejar de tener presente todo lo anterior, es importante observar que existe una variación en el plano subregional y que los países experimentarán la transición demográfica de modo diferente. En realidad, algunos países ya han empezado a envejecer y sus experiencias actuales muestran indicios de lo que podría ocurrir en otras partes de América Latina. Consideremos las situaciones comparables de Cuba y la República Dominicana. Los dos países caribeños empezaron a envejecer a finales del siglo XX: Cuba empezó a principios de la década de 1970, y la República Dominicana lo hizo en la de 1980. Además, los dos países están considerados como países en desarrollo: Cuba con un PIB per cápita de 7.602 dólares, y la República Dominicana con uno de 7.114 dólares en el 2015.

Sin embargo, en términos de calidad de vida de los mayores, Cuba supera a su vecino, si bien envejece a un ritmo mucho más rápido a causa de su menor tasa de natalidad (1,61 nacimientos por mujer frente a los 2,45 nacimientos en la República Dominicana). Esa diferencia se explica en buena parte por el sistema sanitario cubano, que las Naciones Unidas sitúa por encima del de varios países europeos. A pesar de ser un país relativamente pobre, la ocurrencia de enfermedades infecciosas es baja y la esperanza de vida es en realidad más elevada que en Estados Unidos. En cambio, el Gobierno cubano no ha realizado unas inversiones proporcionales en el sistema de pensiones, a pesar de la promesa de hacerse cargo de los ciudadanos desde la cuna hasta la

tumba. Eso, a su vez, ha forzado a muchos mayores cubanos a salir a la calle para hacer trabajos menores con los que contribuir al sostén de sus familias. Sin embargo, en comparación con la República Dominicana, las condiciones de Cuba son tolerables. En términos de acceso a la calidad de la atención sanitaria y de esperanza de vida, la República Dominicana se sitúa muy por debajo de la isla vecina. Asimismo, en términos de seguridad social, su sistema de pensiones no es mejor que el de Cuba. Un informe del 2016 de la Oficina Nacional de Estadística de la República Dominicana descubrió que sólo un 11,2% de su población mayor gozaba de una pensión y que tres cuartas partes de esa cohorte recibía prestaciones

El envejecimiento, además de la carga económica y la consiguiente desaceleración económica en toda América Latina, también significa que no cabe esperar un cambio en las condiciones sociales. Probablemente vuelva a crecer la acusada desigualdad

por debajo del nivel de pobreza. Los ciudadanos de la República Dominicana no sólo tienen que trabajar más allá de la edad de jubilación, sino que tienen que hacerlo en peor estado de salud.

Cuba y la República Dominicana son un extremo del espectro. En el otro se encuentran países como Uruguay y Costa Rica. Estos últimos también han empezado el envejecimiento, pero probablemente gestionarán la transición mejor que sus vecinos gracias a su gran inversión en capital humano. Es sabido que Costa Rica desmanteló su ejército en la década de 1940 para invertir fondos en educación y atención sanitaria. Hoy, el país ofrece una sanidad universal a todos sus ciudadanos y residen-

tes permanentes, y tiene un eficaz sistema estatal de pensiones. Uruguay, por su parte, posee un nivel de calidad de vida comparable al de muchos países europeos y supera a todos los demás países de la región. En el 2016, consciente de las dificultades demográficas que se avecinaban, inició un ambicioso programa de reestructuración financiera en colaboración con el Banco Mundial para aumentar la tasa de ahorro de la población con la esperanza de que esos ingresos adicionales reforzaran el sólido programa de seguridad social del país. Así, los dos países proporcionan a sus ciudadanos mayores eficaces programas de protección social que reducen la necesidad de trabajar más allá de la edad de jubilación; al mismo tiempo, siguen invirtiendo en una infraestructura pública capaz de mantener el cre-

cimiento económico a pesar de la disminución de la población activa. Aunque semejantes medidas no resolverán todas las dificultades relacionadas con el envejecimiento demográfico, sí que han permitido a esos gobiernos ganar tiempo para diseñar proactivamente políticas públicas con las que luchar contra el problema a largo plazo de mantener unas economías productivas.

Esos cuatro países reflejan dos sendas posibles para el resto de América Latina, aunque no es probable que reflejen el curso que tomará la mayoría de ellos. Lo más probable es que suceda algo intermedio debido a las permutaciones políticas y económicas que tienen lugar dentro de la región. Consideremos el caso de México. En el plano nacional, el país es uno de los más ricos de la región y un miembro activo de la OCDE, por lo que parecería que se encuentra entre los mejor preparados ante un paisaje demográfico cambiante. Eso es sólo parcialmente cierto, porque al considerar las estadísticas en el plano subregional, aparecen marcadas diferencias. La entidad política más rica es Ciudad de México, que tuvo un PIB per cápita de 23.130 dólares en el 2007 y un índice de pobreza que rondó en torno a un 29% en el 2015. En cambio, el estado más pobre del país, Chiapas, tuvo un PIB per cápita de 3.647 dólares en el 2007 y presentó un índice de pobreza de casi un 75% en el 2015. Un mejor punto de comparación para ambas entidades es el constituido por Nicaragua y Honduras, que poseen un índice de pobreza de un 30% y un 62,8% respectivamente, según el Banco Mundial. Además, Ciudad de México y Chiapas experimentan diferentes ritmos de envejecimiento. La tasa de fecundidad en Ciudad de México es de 1,52 nacimientos por mujer, muy por debajo de la tasa de reemplazo. En Chiapas, la tasa es de 2,47 nacimientos, ligeramente por encima de la reposición pero empezando a descender.

Al margen de países específicos, el principal problema para América Latina es que empezó a envejecer mucho antes de modernizarse y ahora necesita diseñar políticas para atender a sus mayores antes de que sobrecarguen las frágiles economías de la región. El envejecimiento, además de la carga económica que crea en toda la región y la consiguiente desaceleración económica, también significa que no cabe esperar un cambio en las actuales condiciones sociales. Probablemente vuelva a crecer la acusada desigualdad, el gran villano económico de América latina desde la descolonización, puesto que pocos adultos tendrán la oportunidad de participar en una economía dinámica y en crecimiento. Además, es probable

que los sistemas de pensiones condicionen la fortuna económica de los individuos que se retiren, limitando aun más su capacidad de ascender en la escala de ingresos.

El tema más interesante son las implicaciones para la política de una transición demográfica de semejante magnitud. A lo largo de los últimos veinte años, los ciudadanos latinoamericanos se han acostumbrado a una mejora de las condiciones económicas facilitada por las inversiones en carreteras, escuelas y otras obras públicas. Ahora bien, la economía política del envejecimiento significa que cada vez se desviarán más fondos hacia la atención a los mayores, lo cual aumentará la probabilidad de polarización política debido a la situación de privación relativa. Según los politólogos, esta última se produce cuando los individuos acostumbrados a cierto estilo de vida de pronto ya no pueden mantenerlo debido a un cambio en las circunstancias políticas, lo cual crea agravios que conducen al apoyo a políticas extremistas. Ha sucedido varias veces en la historia latinoamericana. Tanto Chávez como Morales llegaron al poder debido a un descontento a gran escala causado por graves recesiones económicas en Venezuela y Bolivia. Más preocupante es el riesgo de violencia civil. Si bien la probabilidad de que unas insurgencias armadas aterricen la región es remota, América Latina experimentará al menos un prolongado período de disturbios y protestas violentas si la situación económica se deteriora significativamente. Ello puede alentar, a su vez, políticas aun más extremas para luchar contra esa violencia, con lo cual se crearía un ciclo vicioso de violencia y contraviolencia.

La salvedad es, por supuesto, que ninguno de los posibles daños esbozados más arriba tienen que ocurrir necesariamente. Por más que la transición económica haya empezado en algunos países, en la mayoría de lugares no está tan avanzada para que una política pública razonable no pueda aplazar los problemas asociados con una sociedad en proceso de envejecimiento. Es innegable que en la región no son factibles soluciones basadas en la alta tecnología, como las utilizadas en Europa y Japón, pero existen soluciones más prácticas y sencillas, como las deducciones impositivas para las personas con hijos. Ninguna solución será la panacea, y la región tendrá que experimentar en el ámbito de la política social para frenar o al menos aplazar lo inevitable. Ahora bien, América Latina se enfrenta a un desafío demográfico descomunal y tiene que empezar a hacerle frente ahora o arriesgarse a una inestabilidad en el futuro.



¿Países árabes, 'primaveras árabes'?

Transiciones y contratransiciones demográficas

Youssef Courbage

INSTITUTO NACIONAL DE ESTUDIOS
DEMOGRÁFICOS, PARÍS.

EN LA HISTORIA DEL MUNDO ÁRABE, 2011 quedará como el *annus mirabilis*. Marcará la historia árabe lo mismo que la llegada de Napoleón a Egipto en 1798. Sin embargo, son pocos, tanto en esa región como fuera de ella (en Occidente, por ejemplo), los que están convencidos de esa trascendencia. Por eso apreciamos aun más la reacción del presidente francés Emmanuel Macron en enero del 2018 con motivo de su visita a Túnez, país que inició las *primaveras árabes*. Macron recordó acertadamente que la *primavera árabe* todavía no ha terminado.

En el 2011, en medio del optimismo ambiente, se previó que los cambios en curso serían portadores de considerables transformaciones: políticas, sociales, económicas, culturales, ideológicas, religiosas. Tras siete años, es algo que tiende a olvidarse y lo que se hace es repetir ad nauseam que a la *primavera árabe* le ha sucedido un *invierno islamista*. Sin embargo, los acontecimientos como la *primavera árabe* sólo pueden ser juzgados a largo plazo, como bien nos recuerda la Revolución francesa, que no dio plenamente sus frutos hasta casi un siglo después.

Los árabes, con Túnez en primera línea, han sorprendido al mundo. Un cambio inevitable,

como acredita la demografía. Ocurrió en Europa en el siglo XVII. La ola de la revolución inglesa de Cromwell se propagó por el mundo entero. No podía dejar de afectar al mundo árabe. Esa región vive desde hace cuatro décadas las mismas transformaciones demográficas, culturales y antropológicas que Europa. Pensar lo contrario es mostrarse esencialista, inventarse un *homo arabicus* o un *homo islamicus*, reacio por definición al proceso.

El progreso de la educación, la erradicación del analfabetismo, primero entre los niños y luego en las niñas, está en el origen de esas transformaciones. El mundo árabe empezó su metamorfosis gracias a la instrucción y el descenso de la fecundidad a partir de los sesenta en los países más avanzados. En el Túnez de Burguiba hubo una voluntad

de modernización con el acceso a la enseñanza por parte de los dos sexos. En Marruecos, los primeros gobiernos de la independencia hicieron de la educación su prioridad, antes de detenerse para no poner en peligro el

statu quo político. Hasta la llegada de Mohamed VI, el poder bloqueó en ocasiones la educación. De ahí el retraso del alfabetización, sobre todo entre las niñas y la población rural.

La educación, una vez generalizada, provoca el descenso de la fecundidad a través del retraso de la edad de matrimonio y la contracepción. La aportación económica de ese descenso no es algo

El progreso de la educación en los países árabes, en los niños y luego en las niñas, está en el origen de las mismas transformaciones demográficas, culturales y antropológicas europeas

que deba ser demostrado, pero puede ser fuente de malestar en las familias. El descenso de la fecundidad a dos hijos, en los países árabes más avanzados, ha sido tan abrupto que ha socavado los valores tradicionales y patriarcales. Por otra parte, la puesta en cuestión del paterfamilias conlleva la de los *padres de los pueblos*.

La endogamia, el matrimonio preferencial con el primo hermano o con otros familiares, esa estanqueidad del grupo familiar, lleva al cierre de los grupos sociales sobre sí mismos y a la rigidez de las instituciones. Se encuentra ahora en claro retroceso. Cuando se hace menos endogámica, la sociedad se abre hacia el exterior, y está potencialmente más dispuesta a la revuelta si se la gobierna de modo despótico. La escolarización masiva y el descenso de la fecundidad pueden provocar también, de modo indirecto, una toma de conciencia y algunas revueltas.

Y la célula familiar acaba trastocada. Con efectos positivos, porque la limitación del número de hijos permite obrar mejor en su cuidado, alimentación, escolarización... Además, en una familia reducida, el modelo al que se encamina la familia árabe, las interacciones padre-madre, hijos-padres, se vuelven más democráticas, lo cual no puede sino tener consecuencias positivas en el plano social. En la situación anterior, la convivencia de unos hijos instruidos y un padre anal-

fabeto pero poseedor del poder absoluto resultaba complicada.

La educación generalizada de los niños y luego las niñas estimula el despertar de las conciencias por el aprendizaje de la lectura y la escritura. De ella se derivarán de inmediato la secularización, el *desencanto* del mundo y luego el descenso de la fecundidad. Son factores indispensables para la *transición democrática*.

Pero no se trata sólo de los jóvenes. Es cierto que los universitarios árabes, de ambos sexos y a menudo en paro, fueron los primeros en rebelarse. Con todo, de Marruecos a Bahreín, los manifestantes pertenecían a todas las franjas de edad.

Esa ola está hoy durmiente. Pero la historia se escribe a menudo con idas y venidas. Recordemos la Europa de hace medio siglo: la efervescencia de mayo de 1968, las modas que se difundían al mundo entero y también al mundo árabe. Hace poco, no lo olvidemos, los manifestantes de Madrid, Barcelona, Lisboa, Roma y Atenas se inspiraron en Túnez y El Cairo. Un gigante como China intentó bloquear la información sobre las revoluciones árabes por temor a que prendieran en el país.

El mundo árabe se ha visto afectado por la oleada modernizadora con un retraso de dos siglos. No es mucho en términos de una historia de larga duración. Sus transiciones, sobre todo demográficas, más tardías que en Europa, han

sido más intensas. De ahí la convergencia demográfica. La fecundidad en la década de 1970 superaba los 7 hijos por mujer, como ocurría en Marruecos. Hoy del Líbano hasta Yemen, la fecundidad ha disminuido, aunque es cierto que a ritmos muy diversos. En el Líbano, de 5,5 a 1,6 hijos. En Marruecos, de 7,5 a 2,2. Incluso el *diplococus* del mundo árabe, Yemen, ha disminuido su fecundidad de 8,5, lo cual era muchísimo, a 5 hijos, una cifra considerable todavía pero que constituye de todos modos un importante progreso. La transición árabe ha tenido lugar a lo largo de una cuarentena de años mientras que en Europa tardó casi dos siglos.

En todas partes, la instrucción precede a las revoluciones políticas. Y cuán banal parece ese fenómeno del acceso a la educación. Hoy la proporción de jóvenes árabes de ambos sexos que dominan la lectura y la escritura alcanza prácticamente un 100%; y no sólo en los países más avanzados como Kuwait, Líbano, Jordania y Palestina, sino también en los menos avanzados como Yemen, Sudán, Mauritania...

La revolución demográfica es, ante todo, el descenso de la mortalidad. En la década de 1950, la esperanza de vida al nacer sólo era de 40 años, hoy es de 75 años o más. ¿Cuál es el significado de ese progreso desde el punto de vista mental? Implica un retroceso del fatalismo. Antes

del gran descenso de la mortalidad, el individuo árabe se veía como instrumento del *qadar*, del destino, todo estaba escrito. Se encontraba constantemente bajo la amenaza de la muerte por enfermedad, accidente, etcétera. Con una esperanza de 75 años, el individuo se ve ahora como inmortal. Se trata, por supuesto, de una ilusión, una percepción, porque todos sabemos que algún día moriremos. Sin embargo, el hecho de que las enfermedades y también la mortalidad se hayan alejado es algo que da alas. El individuo piensa que el futuro es suyo, puede embarcarse en proyectos a largo plazo. Hoy, cuando se jubila a los 60-65 años, ya no se dice "me voy a mi casa, a dormir y morir". El descenso de la mortalidad ha dinamizado la moral de los individuos.

El descenso de la fecundidad que sigue al de la mortalidad está también cargado de significado. Da a entender que son ya la persona y la pareja, y sólo ellos, quienes deciden el número de hijos. Ya no hay decisión sobre el número de hijos impuesta por el poder. Hoy la decisión de tener o no tener hijos, tener uno, dos o diez, incumbe al individuo, y ello constituye una poderosa evolución mental. El individuo se convierte en creador.

La soltería definitiva en el Magreb ronda un 10%, un 7-8% en Oriente Medio. Hoy la familia ya no puede imponer un marido a la hija. Ésta puede preferir mantenerse soltera antes que verse obligada a casarse con un hombre más viejo, feo y a menudo menos instruido que ella. Y vemos el declive del matrimonio endogámico: en Marruecos de un 30% (1995) a un 15% (2010). La endogamia significa la estanqueidad del grupo familiar, con el cierre de unos frente a otros. El matrimonio exogámico significa apertura, cambio, modernidad, y estimula la mezcla de las poblaciones y el espíritu de iniciativa.

A escala familiar, en la década de 1960, era el paterfamilias, el padre, quien lo decidía todo. La madre se borraba y los hijos debían obediencia a un padre dominador y mucho menos instruido. Gozaba él solo de la autoridad y dictaba su voluntad a la mujer y el resto de la familia. La hermana, por su parte, debía obediencia al hermano; hoy ya no acepta el dominio

del hermano. La contracepción, liberadora del cuerpo de la mujer, cuestiona el poder del varón sobre el cuerpo femenino.

De modo que, con la generalización de la instrucción, nos hallamos con una cascada de cuestionamientos en el seno de la familia. La familia es la escala micro, la sociedad es la escala macro. Y las evoluciones silenciosas que han tenido lugar a escala familiar no podían no tener repercusiones a escala social. La contestación de la autoridad política a partir del 2011 responde a la misma contestación dentro de la familia. Cuando la autoridad del padre se pone en entredicho, se ve a su vez amenazada la de quien detenta el poder político. Cabe afirmar que a la familia numerosa autoritaria correspondía un régimen político que era también autoritario y que el paso a una familia reducida es una condición necesaria –por más que no suficiente– de la salida del autoritarismo.

Unas tasas de crecimiento demográfico elevadas pueden comprometer el crecimiento económico. Ahora bien, en el umbral de las *primaveras árabes*, una nueva demografía parecía perfilarse en el horizonte y abrir la posibilidad de percibir *dividendos demográficos*. Cuando el ritmo de la demografía se hace más lento, aumenta el empleo productivo. Gracias a la subidas de las tasas de ahorro, de la acumulación de capital y de las inversiones, aumenta el PIB (global y per cápita), lo cual abre la vía para un futuro económico más prometedor que en una situación de fuerte crecimiento demográfico. Porque cada vez habrá más población en edad de trabajar.

Las modificaciones en la estructura de edad generan una desaceleración de la presión sobre el mercado de trabajo. Con esa presión menor hay más oportunidades para que las mujeres puedan penetrar en el mercado laboral. Las sociedades árabes son tradicionalmente patriarcales y en ellas el rol productivo incumbe en esencia al hombre. Sin embargo, cada vez más mujeres han entrado en el mundo laboral, lo cual podría acelerar la modernización de las sociedades. Esa entrada en la fuerza de trabajo podría facilitar su consiguiente entrada en el ámbito político.

La reducción del crecimiento demográfico comporta una mejora del reparto

de la renta nacional por la disminución de las desigualdades demográficas. Los ricos, a menudo occidentalizados, tienen un número reducido de hijos; los pobres, menos *globalizados* tienen mucha más descendencia. Los ricos acaparan una buena parte del *pastel* nacional y repartido entre un número poco elevado de miembros de la familia: padre, madre, 2-3 hijos. En el extremo opuesto, los pobres tienen 7-8 o más hijos. Gozan de la porción congrua de la renta nacional y deben repartirla entre una familia muy numerosa. Por lo tanto, la disminución de las diferencias de fecundidad en la sociedad genera la reducción de las desigualdades en el reparto de la renta nacional.

Se trata de una transición demográfica que algunos temen como la peste, porque va acompañada del envejecimiento de la población. En realidad, se trata de un riesgo muy exagerado. El envejecimiento demográfico no es, de entrada, una realidad inmediata. Por otra parte, existen medios para enfrentarse a él, especialmente gracias a la solidaridad intergeneracional, una realidad en los países árabes.

* * *

Por ello, llegábamos a la conclusión, al final del decenio pasado, de que la transición demográfica era la señal anunciadora de la transición democrática.¹ Visto de modo retrospectivo, ¿es posible mantener el optimismo? La demografía reciente del mundo árabe proporciona numerosas señales ambiguas. En Egipto, ese país gigantesco de más de 100 millones de habitantes, la fecundidad ha repuntado enérgicamente hasta los 3,5 hijos por mujer. Argelia (41 millones) le sigue los pasos; la fecundidad había caído al final de la segunda guerra de Argelia a los 2,4 hijos en el 2000, en el 2016 fue de 3,1. Es cierto que Argelia no es Egipto. Dispone de espacio, pero es tributaria de su renta gasista. Túnez, que fue el *hermoso modelo* de los demógrafos y politólogos árabes, pionero de las *primaveras árabes*, se encuentra en contratransición demográfica, aunque algo más atenuada: 2 hijos en el 2000, 2,4 ahora.

Sin embargo, hay contraejemplos, como Marruecos, donde la fecundidad baja y se acerca a la europea: 2,2 hijos. Paradójicamente también en Arabia Saudí y los Emiratos Árabes la fecundidad sigue disminuyendo a pesar de la política pronatalista de los poderes, a pesar de su gran riqueza y la presencia de fuertes poblaciones extranjeras que se desearía sustituir por sujetos nacionales dotados de una elevada fecundidad. En Líbano, el matrimonio está en crisis, sobre todo a causa de la emigración, que perturba el mercado matrimonial, aumenta la soltería y comporta matrimonios tardíos. La fecundidad libanesa baja en todas las comunidades: cristiana, suní, chií...

Paradójicamente, la fecundidad sigue siendo muy elevada en los países en guerra. Irak, a pesar del estado de guerra permanente que se remonta a 1980 y es sinónimo de pauperización, ha mantenido una fecundidad muy elevada. Sudán, país en guerra, misma situación. Yemen ostenta el triste privilegio de ser el país árabe más fecundo: casi 5 niños. En Siria, antes de la actual guerra, la fecundidad se mantenía elevada y sin bajar, en la década del 2000 y hasta el 2010-2011: 3,5 hijos, sin cambio. Lo mismo en Palestina, donde la fecundidad sigue muy alta: 4,1 hijos, y también en Jordania.

De modo que hay tantos países árabes en los que baja la natalidad como países en los que ésta sigue alta o aumenta. Sin embargo, calculando por poblaciones y no por número de países (Egipto es infinitamente más relevante que Qatar), encontramos que un 80% de las poblaciones árabes viven situaciones de contratransición demográfica.

¿Quiere eso decir que el proceso de modernización demográfica se ha detenido? ¿Acaso a la transición democrática que vimos actuar en el ámbito familiar, el ámbito social y político, ha sucedido una contratransición demográfica y política, el freno del proceso de modernización? ¿Volvemos a familias patriarcales, a regímenes autoritarios?

La inversión de la tendencia demográfica no significa obligatoriamente el regreso a la tradición, el rechazo de la modernidad. No significa de modo necesario que los regímenes políticos vayan a retroceder. Porque el *efecto trinquete*, según el cual un fenómeno puede perpetuarse aunque ya no intervenga la causa que lo origina, adquiere aquí todo su significado. En efecto, la transición democrática ha sido desencadenada por la transición demográfica. Ahora bien, el efecto trinquete quiere decir que el freno de la transición demográfica no supondrá forzosamente un retroceso para la transición política. Hoy otras causas susceptibles de tomar el relevo hacia la transición democrática:

la condición de las mujeres, su nivel de educación, su papel de cabeza de familia, etcétera.

Algunos dirán que el *retorno al islam* explica las contratransiciones demográficas. No sólo en el ámbito político, como ocurre con la llegada al Gobierno del Partido de la Justicia y el Desarrollo en Turquía (sin consecuencias demográficas), el ascenso del hermano musulmán Morsi al poder en Egipto, o en Túnez con la aparición del partido Ennahda. Sino que más que el islam político, es el islam doméstico, su huella sobre la familia, lo que explicaría el repunte de la fecundidad, el regreso a la tradición, la *autenticidad*, los valores familiares, con el deber de humildad y obediencia de las mujeres, cuyo papel principal sería traer hijos al mundo y criarlos.

Ahora bien, los datos muestran que en Egipto y en Argelia y también en Túnez, de entre las explicaciones formuladas para dar cuenta de la recuperación de la fecundidad, la única convincente es la relativa al empleo femenino, que ha retrocedido. El retroceso de la actividad femenina ha provocado un ascenso del familiarismo, la vuelta de las mujeres al hogar y un incremento de la fecundidad.

Por lo tanto, no se puede excluir a las mujeres del mercado laboral y aspirar a una transición demográfica armoniosa. Por desgracia, las deficiencias del trabajo femenino en el mundo árabe constituyen una certeza que lo coloca muy lejos del resto de la humanidad por lo que hace a la actividad femenina: participan en el mercado de trabajo en torno al 22%, mientras que en el Lejano Oriente e incluso en Indonesia, el país musulmán más poblado, la tasa de actividad femenina se acerca al 70%.

Hay también explicaciones políticas. En Siria, con un régimen de dos velocidades, la minoría en el poder goza de un régimen demográfico casi europeo, con una fecundidad de 2 hijos, y la mayoría, formada por las tres cuartas partes de la población, presenta una fecundidad de 5 hijos. En Palestina, el conflicto israelí-palestino ha empujado a una y otra parte a fecundidades anormalmente elevadas, no sólo entre los palestinos sino también entre los judíos israelíes. Sin embargo, la fecundidad de los palestinos se atenúa, mientras que la de los judíos se eleva. En 1992, los palestinos tenían 6,8 hijos, hoy 4,1. Los palestinos de Israel tenían 4,3, ahora sólo 3,08, menos que sus compatriotas judíos, cuya fecundidad no deja de aumentar: 2,62 en 1992, hoy 3,16. Ello se debe en gran medida a las colonias judías creadas en Cisjordania y Jerusalén Este, lo que demuestra que la fecundidad es también, en esa región del mundo, un instrumento de combate.

La transición democrática en los países árabes ha sido desencadenada por la transición demográfica. Ahora bien, el freno a la transición demográfica, con repunte de la fecundidad, no supondrá un retroceso para la transición política

1. Fue entonces la conclusión del autor junto con Emmanuel Todd en la obra *Encuentro de civilizaciones*, Foca Ediciones, Madrid, 2009.

Los desafíos de política económica de una Europa envejecida

Iain Begg

INVESTIGADOR DEL INSTITUTO EUROPEO DE LA ESCUELA DE ECONOMÍA Y CIENCIAS POLÍTICAS DE LONDRES Y CODIRECTOR DEL FORO DAHRENDORF (UNA INICIATIVA CONJUNTA DE LA ESCUELA HERTIE DE GOBIERNO Y LA ESCUELA DE ECONOMÍA Y CIENCIAS POLÍTICAS DE LONDRES FINANCIADA POR STIFTUNG MERCATOR).

Lisa ten Brinke

INVESTIGADORA PARA EL FORO DAHRENDORF (WWW.DAHRENDORF-FORUM.EU).





EL CAMBIO DEMOGRÁFICO ES UNA de las tendencias sociales más predecibles porque se encuentra sometido a patrones de comportamiento muy arraigados. La fecundidad, las mejoras en atención sanitaria y la esperanza de vida tienden a evolucionar con lentitud. La inmigración, como se ha visto en años recientes, puede moverse de modo más errático, pero sólo ocasionalmente tiene un efecto espectacular en la composición de la población. Sin embargo, a pesar de que los datos demográficos son bien conocidos, existen muchas preguntas sin respuesta acerca de las consecuencias económicas del envejecimiento, cómo actuar ante él y cómo adaptar las políticas sociales y de otro tipo para manejar las tensiones a las que da lugar.

La magnitud del desafío

El desafío económico más evidente es cómo pagar los costes del envejecimiento, dado el deterioro de la relación aritmética que vincula la capacidad de la población en edad laboral con el número de personas mayores. Las proyecciones pueden parecer desalentadoras. Como media en la actual Unión Europea, la tasa bruta de dependencia de los mayores es de 3,38 personas en edad laboral (entre 16 y 64 años) por cada persona mayor (de 65 o más años). En el 2060, se calcula que habrá pasado a 1,94/1, tras haber sido de 4/1 en fecha tan reciente como el 2010. Las tasas de los muy mayores (de más de 80 años),

que requieren muchísimo más apoyo al cuidado, son de 12/1 hoy y caerán a 4,63/1 en el 2060.

Existen también marcadas diferencias entre los estados miembros de la Unión Europea, por más que las mismas tendencias generales se aprecien por todas partes. Las tasas de dependencia más elevadas (en torno a 3/1) se encuentran en Grecia, Italia y Portugal en el sur de Europa, y en Finlandia, Alemania y Suecia en el norte. En cambio, la tasa se acerca a 5/1 en Chipre, Irlanda y Eslovaquia. El deterioro estimado de esas tasas de dependencia es también muy diverso; se reducirá a 1,5/1 en Grecia, Polonia y Letonia en el 2060, aunque incluso en los países comunitarios mejores situados (Irlanda, Francia y el Reino Unido) la tasa caerá a 2,3/1.

Allí donde los sistemas de pensiones han evolucionado para introducir una mayor provisión privada (mediante lo que se conoce como el *segundo pilar* de los fondos de pensiones promovidos por los empleadores o el *tercer pilar* de los planes de ahorro individuales), el desafío de la política pública es diferente. En muchos países de la Unión Europea, se ha utilizado un tratamiento fiscal favorable para inducir a los actuales trabajadores a modificar en ese sentido las provisiones

Hay tres opciones ortodoxas contra los costes del envejecimiento: retrasar la jubilación, más impuestos al trabajo y frenar las prestaciones vinculándolas a la fortaleza de la economía

de la jubilación con el fin de reducir la futura carga del Estado. Aunque potencialmente positivo para la hacienda pública, el cambio a la financiación privada de las pensiones no altera el hecho innegable de que la proporción de

los ingresos nacionales destinada a los pensionistas puede ser igual de elevada tanto si surge de la provisión privada como de la pública.

Hay algunas recetas políticas inmediatas. La maximización de la tasa de empleo de la población en edad laboral siempre será útil. Aunque las proyecciones de las tasas brutas de dependencia son inexorables, los recursos disponibles vienen determinados por el número de personas activas y su productividad. Si las personas en edad laboral están desempleadas o inactivas económicamente, también deberán recibir apoyo de las que trabajan. Por lo tanto, es mejor medir la *capacidad de carga* de los estados de bienestar europeos mediante la relación entre quienes trabajan y los dependientes. En este sentido, los planes de prejubilación son claramente contraproducentes porque incrementan el número de jubilados y han demostrado escaso valor a la hora de proporcionar empleo a los trabajadores jóvenes. La creencia de que un puesto de trabajo dejado vacante por un trabajador mayor equivale a uno disponible para un trabajador joven ilustra lo que los economistas llaman la *falacia de la cantidad fija de empleo*, la equivocada noción de que la economía tiene un número de trabajos fijo.

Ahora bien, existe una razón de equidad en la jubilación temprana por la desigual pauta en la vida laboral de diferentes grupos sociales y por la naturaleza de los diferentes empleos. Podría considerarse injusto que la misma edad de retiro sea válida para un trabajador manual que empieza a trabajar a los 16 años y para un graduado con dos carreras que habrá empezado unos cuantos años más tarde. Si además el trabajo del primero es exigente físicamente, se refuerza aun más el argumento para recibir una pensión antes. Un compromiso evidente es hacer que el criterio para el acceso a la jubilación sean los años trabajados en vez de establecer una edad de retiro fija. Cabría hacer algunos ajustes para tener en cuenta el tiempo no trabajado por la crianza de hijos, por ejemplo, o por un trabajo con una gran exigencia de esfuerzo físico.

¿Qué puede hacerse?

El abanico de soluciones está formado por tres opciones ortodoxas principales y dos más polémicas. La primera, ya adoptada por muchos países de la Unión Europea, es elevar la edad de jubilación. La razón clara es dar lugar a más años de contribuciones y a menos años de recepción de pensiones, alterando de ese modo la tasa entre población activa y dependiente. Las complicaciones surgen en la transición, en especial si un segmento de la actual población activa tiene (o cree que tiene) que pagar dos veces debido a la necesidad de sufragar las pensiones actuales al tiempo que pospone la propia. Una dimensión de género puede aparecer si se pide a las mujeres, que en muchos sistemas tenían tradicionalmente edades de retiro más bajas, que se adecúen a la más elevada edad de jubilación masculina. Sin embargo, también es importante observar que elevar la edad de jubilación no altera necesariamente los costes del envejecimiento no relacionados con la jubilación (en especial, la asistencia sanitaria y social).

En segundo lugar, los costes del envejecimiento podrían sufragarse con mayores impuestos a la población activa. El inconveniente obvio de semejante respuesta es la clara injusticia que supondría para la actual población activa, que ya se enfrenta a la factura más elevada por los gastos de la generación anterior y que quizá tenga que pagar más para asegurar su propio futuro. Sin embargo, también deben tenerse en cuenta ramificaciones más amplias. Una carga impositiva más elevada reduciría los incentivos para trabajar y, dependiendo de los instrumentos usados para obtener esos ingresos, disminuir la competitividad internacional al aumentar los costes empresariales.

Una tercera solución consiste en frenar el flujo de prestaciones a los mayores. Es algo que puede organizarse directamente mediante fórmu-

las que vinculen los derechos a percibir una pensión pública con la fortaleza de la economía, de modo que se establezca un límite para la cuota de las pensiones en el producto nacional bruto. Dos posibles opciones, entre muchas otras, podrían ser indexar las pensiones con el crecimiento que sea más bajo de los precios al consumo o de los salarios reales, o bien relacionar los gastos en pensiones con el crecimiento de PIB. Ahora bien, lo que esas reformas no pueden hacer fácilmente es reducir los futuros costes asistenciales del envejecimiento. A menos que la sociedad esté preparada para ofrecer menos cuidados a los mayores, es probable que crezca el coste de enfrentarse a dolencias crónicas relacionadas con la edad, como la demencia. Por ello, las soluciones tendrán que proceder de la fiscalidad sobre los ingresos o, a veces de modo más verosímil, de la riqueza de los mayores. La adopción de esa vía ha demostrado ser muy complicada para los políticos y también puede afectar a las generaciones más jóvenes puesto que reduce las transferencias intergeneracionales de riqueza. Y los mayores pueden afirmar de modo justificado que han contribuido durante toda su vida laboral y que, por lo tanto, tienen derecho a las prestaciones.

De modo más polémico...

Las dos formas más controvertidas de enfrentarse con los costes del envejecimiento tienen características muy diferentes. Una es aumentar la población laboral fomentando la inmigración de trabajadores jóvenes. La segunda es crear una reserva de activos internacionales (un fondo soberano de inversión, FSI) capaz de generar un flujo de ingresos que se usarían para sufragar los costes de la política social. Curiosamente, ambas pueden ser vistas como consecuencias de la globalización y, desde esa perspectiva, deben interpretarse con matices (también en relación con la moralidad de la solución).

Si consiguen tener una tasa de empleo elevada, los inmigrantes serán contribuyentes netos a las arcas públicas, y más si poseen las habilidades que atraen salarios altos. Sin embargo, la migración también supone una fuga de cerebros del

país de origen al país de acogida puesto que el primero ha pagado la educación del migrante. Al mismo tiempo, los migrantes envían a menudo ingresos a sus países y tienen posibilidad de aumentar su *capital humano*; en ocasiones, vuelven a su tierra y con ello aumentan la reserva de capital humano de su país. Irlanda, durante mucho tiempo un país de emigración, se convirtió en un imán para emigrantes retornados durante sus años de auge. A largo plazo, es evidente que también los inmigrantes y sus familias envejecerán y esperarán recibir las mismas prestaciones que la población autóctona. Sin embargo, a medio plazo, los efectos fiscales directos serán positivos, siempre que los inmigrantes se integren en el mercado de trabajo del país de acogida.

Algunos FSI pueden ser enormes; por ejemplo, el principal fondo noruego (en buena parte invertido en el extranjero) se valora en cerca de tres veces el PIB del país, y los rendimientos que genera, tras deducir costes administrativos y de otro tipo, giran en torno a un 4%. Eso significa un flujo anual de alrededor de un 12% del PIB, equivalente a más o menos la mitad de todo el presupuesto de protección social de Noruega. La vía del FSI también tiene efectos desiguales, y refleja el análisis sobre la migración. El rendimiento de la inversión que fluye desde los países en los que el fondo invierte hasta el país de origen significa menores ingresos en los primeros y más altos en el segundo. Por otra parte, al incrementar la tasa de inversión en el país receptor, el FSI habrá contribuido a su desarrollo económico, con beneficios para ambos. Los fondos de inversión suelen estar al margen del control democrático directo, lo cual plantea interrogantes acerca de su legitimidad. Ahora bien, si los países deciden seguir esa vía, cabría adoptar reglas para que el fondo consagrara preferencias relacionadas con la ética de sus decisiones inversoras (como hace hoy Noruega) o con el modo en que se usan las rentas.

Otras consideraciones sobre política

Al margen de que se encuentren soluciones a los costes del envejecimiento

en el sector social (alcanzando al mismo tiempo una equidad dentro de cada generación y entre generaciones), existen varios desafíos económicos estructurales ocasionados por el cambio demográfico. El primero está relacionado con la oferta de trabajo. Las personas mayores tienden a consumir un mayor volumen de servicios asistenciales, lo cual exige un considerable aumento de los trabajos relacionados con tales servicios. En los países de la Unión Europea, esos trabajos tienden a estar mal retribuidos y, en la medida en que están pagados de modo predominante con dinero público, seguirán sujetos a limitaciones económicas. No se trata de una conjunción que tenga muchas probabilidades de atraer el incrementado número de trabajadores asistenciales que sin duda harán falta. En muchos países comunitarios, la fuerza de trabajo existente consiste de modo desproporcionado en trabajadoras mayores que saldrán del mercado laboral relativamente pronto. Por lo tanto, será el doble de difícil enfrentarse a las demandas asistenciales por la necesidad de sustituir la mano de obra existente y también de satisfacer la nueva demanda.

El segundo desafío es que la proporción general del gasto público resulta importante. La acción para mejorar la sostenibilidad a largo plazo de la política fiscal puede liberar recursos para cubrir los gastos del envejecimiento, siguiendo la misma lógica que en el caso de los FSI. El pago de intereses de la deuda puede constituir un componente importante de los gastos públicos, en función del volumen de la deuda y el tipo de interés medio aplicado. Según los datos de Eurostat, los pagos de los intereses de la deuda pública variaron en el 2017 (como proporción del PIB) desde casi cero en Estonia y un 0,35% del PIB en Suecia hasta casi un 4% en Portugal e Italia, con España (2,5%) y el Reino Unido (2,7%) entre los países con un aumento más pronunciado debido a los años de crisis. Una menor carga del servicio de la deuda resulta atractiva, pero posee implicaciones para la distribución de la carga porque significa que la presente generación tiene que pagar aun más impuestos para reducir

la deuda pública. También importa el modo en que eso se consigue: a los gobiernos les resulta a menudo más fácil recortar la inversión pública que el gasto corriente, en detrimento del crecimiento potencial de la economía. En la práctica, la reducción de la deuda también requiere que los gobiernos adopten y respeten –lo cual a menudo es más importante– unas reglas presupuestarias adecuadas. Por ejemplo, Suecia tuvo como objetivo la obtención de un superávit público de un 2% del PIB, lo que significó una reducción más rápida de la deuda, aunque luego relajó un poco ese objetivo.

La vivienda es un tercer desafío estructural. Cabe esperar que el envejecimiento incremente el número de hogares (que requieren una adaptación adicional a las necesidades de los residentes en especial, en el caso de jubilados que viven solos) y es posible que ello incluya la elección de emplazamientos diferentes de los de la población activa. Si la respuesta consiste en nuevas comunidades de jubilados, éstas tendrán que verse complementadas con el alojamiento de un ejército de trabajadores asistenciales y con la provisión de infraestructuras como los centros de salud. Por lo tanto, habrá que adaptar a ello la ordenación territorial.

En cuarto lugar, surgirán incómodas preguntas en torno a la riqueza y el modo en que es gravada. En muchos países de la Unión Europea, la pobreza de los pensionistas ha sido sustituida por la prosperidad de los pensionistas, a pesar de la persistencia de la pobreza entre ciertos grupos de mayores. Los impuestos sobre el patrimonio (incluidos los tributables tras el fallecimiento) son un tema emotivo, pero constituyen una forma de reducir las demandas impositivas de la población activa. Sin embargo, a medida que crezca la proporción de mayores en la población votante, su voz política podría oponerse a semejantes impuestos (y, en especial, dada su mayor tendencia a votar que los jóvenes).

Y también está la repercusión sobre el crecimiento económico. Hay dos razones verosímiles para que la tendencia de la tasa de crecimiento caiga debido al envejecimiento: en primer lugar, una fuerza laboral más vieja tendrá probablemente una menor propensión a la innovación y la asunción de riesgos; y, en segundo lugar, los consumidores de más edad se sienten menos atraídos por productos y servicios innovadores, además de presentar una tendencia a pedir servicios de baja productividad. El crecimiento también podría verse debilitado si la inversión en bienes públicos

se ve desplazada por las demandas en favor de que el gasto corriente haga frente al envejecimiento.

Conclusiones

Los desafíos demográficos de Europa son formidables y pondrán a prueba la capacidad de respuesta efectiva de los sistemas políticos. Será necesaria una mayor financiación para proporcionar la asistencia sanitaria y social de una población de mayores significativamente más amplia y para garantizar la sostenibilidad de los sistemas de pensiones. Esas demandas pondrán a prueba la *capacidad de carga* de todos los estados europeos de bienestar a medida que descienda la proporción entre población activa y personas mayores, si bien existen pronunciadas diferencias entre los países, tanto en lo referente al calendario de los efectos del envejecimiento como a su extensión.

A pesar de todo, existen soluciones creíbles y conocidas. Lo que hace falta es un gran pacto entre diferentes capas de la sociedad y la valentía política para aplicarlo con decisión. Las transformaciones exigidas se verán moldeadas por las tradiciones sociales de cada país y por las acciones ya emprendidas o las reformas por aplicar. De ello se sigue que lo más apropiado no es una fórmula única para todo el mundo ni una lista establecida de buenas prácticas. Además, puede ser de ayuda el intercambio de experiencias y las pruebas con mecanismos que han sido eficaces en otros lugares.

Con todo, hay que enfrentarse a muchos dilemas políticos. El aporte de migrantes puede atenuar la carga fiscal, pero es susceptible de conducir a una presión sobre ciertos servicios públicos y a menudo ha exacerbado las tensiones sociales existentes tras el populismo. La sobrecarga del actual grupo en edad laboral mediante una mayor fiscalidad puede resultar en una reducida motivación para trabajar, con lo que se contraería aun más la base impositiva. El recorte de las prestaciones puede aligerar la carga sobre la hacienda pública, pero debilita el contrato implícito entre el Estado y quienes han sido contribuyentes durante toda su vida laboral. En resumen, hacer frente a los costes del envejecimiento exige alcanzar compromisos morales y distributivos difíciles y que no suponen en ningún caso una elección fácil.

En última instancia, enfrentarse al envejecimiento no es un problema de asequibilidad ni de incapacidad de adaptación por parte del sistema de protección social. Es, por encima de todo, cuestión de movilizar las coaliciones necesarias y de poseer la voluntad política para introducir las medidas de reforma óptimas.

Las dos formas controvertidas de enfrentarse con los costes del envejecimiento son el recurso a los inmigrantes (contribuyentes netos a las arcas públicas) y los fondos soberanos de inversión (por ejemplo el de Noruega, valorado en tres veces su PIB) acusados de falta de control democrático

¿España en crisis demográfica?

Contra tópicos y alarmas

Julio Pérez

CIENTÍFICO TITULAR DEL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS (CSIC).

La demografía en España arrastra una carencia grave, y no es la natalidad, sino la escasez de demógrafos. Ninguna universidad ofrece esa carrera, sólo alguna asignatura en otras titulaciones, o algún meritorio pero aislado programa de doctorado.

De eso se beneficia el alarmismo demográfico. Para alimentarlo basta con pontificar sobre la pérdida de valores, las conductas correctas, la sana moral, los intereses patrios. Descubrimos la España vacía a golpe de best seller y de disputas partidistas sobre la ponderación territorial de los votos; reunimos una comisión del Senado sobre despoblamiento rural, y un consultor privado sin formación demográfica y sin pasar por previa comparecencia como los expertos convocados, endosa a las conclusiones oficiales un dossier de diez páginas sobre el necesario fomento de la fecundidad... ¡en

las zonas rurales! Algunos principios de análisis básico (como el que dice que cuanto menor es la escala poblacional, mayor es el papel de las migraciones para explicar su pirámide) parecen una tontería de los demógrafos, innecesaria para asesorar a nuestros senadores. Reunimos la mesa parlamentaria que revisa los pactos de Toledo, y el director del INE, un economista, explica que

Nunca hemos vivido una situación demográfica más favorable. En cien años, la humanidad ha multiplicado su volumen por seis, y España ha crecido de unos 18 millones en 1900 a más de 46,5 el año pasado

las proyecciones demográficas, hechas por su institución, no se cumplen ¡porque las hacen los demógrafos! Se crea una comisión sobre el reto demográfico y al frente se nombra al anterior director general de la Policía, integrante del círculo piadoso del Ministerio de Interior que da medallas al mérito policial a alguna Virgen castreña. Y claro, el primer *experto* convocado es el director de un lobby natalista y patriota, religioso y analista financiero, preocupado por la degradación de las raíces cristianas de nuestra civilización.

En definitiva, que no haya demógrafos es una bendición para quienes se han apropiado del análisis sobre la situación poblacional española. Deben asustarnos mucho la baja natalidad y el envejecimiento, el invierno más frío, el suicidio demográfico. Te-

nemos que asumir la explicación evidente, el egoísmo, el individualismo, el hedonismo imperantes, y resignarnos al remedio lógico: remoralizar los comportamientos individuales y aumentar

el apoyo social y político a la familia. Así se afirma ya en infinidad de documentos oficiales, como el Plan de Dinamización Demográfica de la Xunta de Galicia, o las actas del congreso nacional del partido gobernante (“Frenar el envejecimiento, en el eje de la ponencia social del PP”, nos dijeron). Y lo mismo podremos encontrar en infinidad de otros países, incluso en textos oficiales de la UE.

Algo deberíamos sospechar de este conjunto de diagnósticos, pronósticos y remedios, no ya por ser ajeno al propio análisis demográfico, sino por ser intemporal. Véase *La decadencia de Occidente* (Oswald Spengler, 1918) y se comprobará que el mensaje no ha cambiado en cien años.

Pero la demografía sí ha cambiado. Si en medio de este clamor les digo que nunca en la historia humana o en la de nuestro país hemos vivido una situación demográfica más favorable, pensarán que los demógrafos no sólo somos escasos, sino que a alguno nos falta un tornillo. El coco demográfico ya no admite disidentes, ni siquiera entre los que nos dedicamos a la investigación y análisis de las poblaciones.

Pero los demógrafos sabemos que desde Spengler, la humanidad ha multiplicado su volumen por seis, y España ha crecido más que en toda historia anterior, de unos 18 millones en 1900 a más de 46,5 el año pasado. Menuda crisis.

Sabemos también que venimos, la humanidad entera, de una esperanza de vida siempre inferior a los 35 años (34 en la España de 1900), por las recurrentes hambres, matanzas y epidemias pero, sobre todo, por una mortalidad ordinaria abrumadora, siempre con un papel central de la mortalidad infantil, superior a un 200%. Con la mortalidad española de 1900 la mitad de una cohorte de nacimientos moría antes de cumplir los



15 años. Todavía podemos hablar con mujeres mayores de la precariedad de las condiciones con que parían, en casa y sin atención médica, y nos contarán cuántos hijos perdieron en el parto o al poco de nacer, o cuántas murieron en ese trance. Menudo pasado glorioso.

Hace escasas décadas los nacidos fuera del matrimonio eran *ilegítimos* y purgaban pecados ajenos. Media España rural enviaba a sus hijas a las capitales a *servir* siendo todavía niñas, a cambio de un plato y una cama. Los más mayores actuales empezaron su vida laboral con un promedio de 14 años. Su escolarización fue precaria y breve para la inmensa mayoría, y aún más si eran niñas; todavía hoy tenemos alto analfabetismo femenino en la vejez de nuestro país. Venimos de una sociedad de mujeres supe-ditadas a la autoridad del padre y del marido, que debía autorizarlas para abrir una cuenta bancaria o solicitar un pasaporte. Aquel mundo, por lo visto, era un dechado de comportamientos éticos hoy abandonados, especialmente por las mujeres, que priorizan sus propios intereses, desoyen las necesidades del resto de la sociedad y rechazan tener hijos. Será esa perversa *ideología del género*.

Ya me parece delirante que alguien considere preferible cualquier momento pasado en cuanto a demografía se refiere, pero si además concede crédito a este conjunto de memeces para explicar las causas del cambio demográfico, es que los demógrafos tenemos problemas para hacernos entender. Déjenme darles una explicación demográfica sobre el cambio demográfico, y después hablamos de moral si quieren.

Lo que hemos cambiado ha sido la estrategia de reproducción poblacional, es decir de mantenimiento de un determinado volumen de población mientras todos morimos. La humanidad entera, hasta hace apenas un siglo, se reprodu-

cía con un número elevado de hijos por mujer, que vivían poco tiempo y llegaban escasamente a edades adultas, viéndose obligados entonces a reiniciar el ciclo teniendo muchos hijos que de nuevo habían de vivir poco tiempo. Fecundidades altísimas, vidas cortas, poblaciones reducidas y precarias, pirámides muy jóvenes, un tercio de menores de 15 años y apenas un 4% de personas mayores, y la mitad de la humanidad, la femenina, dominada y sobredeterminada por su función en la reproducción colectiva. No había alternativa, o eso o la extinción.

Pero sí la había, a condición de entender lo que durante siglos sólo había estado al alcance de unos pocos: cuidar mejor de los hijos, no explotarlos de forma precoz como fuerza de trabajo, disponer de medios y servicios para atender su salud, para darles educación, para dotarlos en definitiva de una infancia. Hizo falta el final del mundo agrario, la presión en pro de la escolarización, la higiene cotidiana, la agudización de la dedicación materna al cuidado de los hijos, la aparición de antibióticos y vacunas, la reducción de las hambrunas... Y el incipiente cambio desencadenó el crecimiento poblacional. No sólo porque aumentase el número de años que vivía

cada nacido, sino porque ahora cada generación llegaba con una proporción mayor de efectivos supervivientes hasta las edades adultas, y podía a su vez procrear.

De ahí el boom demográfico mundial, mientras la fecundidad no hacía más que descender. Hemos cambiado nada menos que nuestra manera de reproducir, haciéndola mucho más eficiente: fecundidades mucho menores, pero dotando de vidas largas a los que nacían, poblaciones de gran tamaño y muy consolidadas, pirámides con una proporción menor de niños que de mayores (lógicamente), y mujeres liberadas de la sobredeterminación reproductora, con

tanta educación o más que los hombres, y disponibles para desempeñar otras funciones sociales o laborales.

Y ahora, si quieren, hablamos de valores y de comportamiento ético, porque, como resulta fácilmente comprensible, nada de todo esto se ha conseguido gratis, ni es el resultado del egoísmo y la inmoralidad. La condición para este salto estratosférico en la eficiencia de la reproducción humana era que los que nacían llegasen con vida hasta la edad de tener hijos y, aún más, hasta la edad de haberlos criado. Eso no se podía haber conseguido sin agudizar la relación altruista frente a los hijos, renunciar a extraer de ellos bienes o servicios, autoexprimirse en el trabajo doméstico y extradoméstico, proporcionarles más años y nivel de educación de los que tuvo nuestra propia generación, elevarlos más allá de nosotros mismos. Es decir, dosis crecientes de afecto, cuidados y dedicación, una lanzadera espacial en la que cada generación impulsaba un poco más allá a la siguiente, obrando el milagro demográfico, una revolución sin precedentes.

Por primera vez en la historia humana hemos democratizado vivir todas las etapas de la vida; todo el que nace hoy en España tiene por delante prácticamente cien años asegurados (recuérdese que la actual esperanza de vida, de casi 84 años, es una ficción que simula la vida media en un ciclo de vida generacional con las actuales probabilidades de muerte en cada edad, es decir, simula que en el próximo siglo nada cambiará a ninguna edad). Por primera vez los hijos se tienen en función de decisiones responsables y no por una imposición de nuestro entorno familiar o social. Esto obliga a una mayor racionalidad de las decisiones, que ahora se toman en función de las expectativas sobre la calidad con que pretende tenerse los hijos, y no sobre su cantidad.

Y ahora, en la culminación de la revolución reproductiva, la alianza internacional entre el conservadurismo más rancio y el liberalismo más agresivo sostiene que el Estado se ha extralimitado, ha invertido demasiado, que el gasto social pone en peligro los equili-

Hemos hecho más eficiente la reproducción: fecundidades menores, pero dotando de vidas largas a los que nacían, poblaciones de gran tamaño, proporción menor de niños que de mayores y mujeres liberadas de la determinación reproductora

brios presupuestarios, la inversión extranjera, el rendimiento de los capitales, la competitividad económica frente a los demás países. Cristine Lagarde, jefa del FMI, afirma que la economía peligra porque los mayores viven demasiado, y el ministro japonés de finanzas pide a sus jubilados que se den prisa en morir.

En realidad la revolución reproductiva ha sido un logro de las personas y de su propio trabajo, con o sin apoyo estatal, y ha favorecido el progreso material y económico, no por el crecimiento poblacional, sino por la mejora de los perfiles formativos y productivos de cada nueva oleada generacional, y por el aumento de peso poblacional de las personas de edad madura con largos trayectos familiares y laborales, que explica la extensión de las clases medias.

La crisis demográfica se basa en falsedades y tergiversaciones. No existe fecundidad de reemplazo, los 2,1 hijos por mujer son un mito. El reemplazo depende del balance entre nacimientos y años de vida, así que la reproducción era más precaria en España cuando se tenía un promedio de 4,5 hijos que hoy. Es un error pensar en la natalidad como si fuese lo principal en la dinámica reproductiva, sin atender al esfuerzo requerido para tener un hijo con los estándares actuales y sin recordar que gracias a ese esfuerzo cada nacido actual *rinde* en población tres veces más que los nacidos hace un siglo. Contra lo que nos cuentan, nunca hubo hundimientos demográficos por baja fecundidad, las crisis demográficas siempre las produjo la sobremortalidad o el éxodo en busca de lugares mejores. Lo de la caída del imperio romano por su baja fecundidad es una mentira de la historiografía reaccionaria decimonónica para hacer creíble la cansina y nunca confirmada decadencia de Occidente. Por cierto, ni siquiera es verdad que España pierda población: desde 2014 no ha hecho más que aumentar; tampoco es verdad que sea el país con la pirámide de población más envejecida, nuestra proporción de mayores no es ni siquiera superior a la media europea.

Aunque llegamos retrasados (al empezar el siglo XX éramos el país con peor mortalidad del continente) hoy estamos entre los países más avanzados en la revolución demográfica. Pero incluso los países más atrasados han empezado ya el mismo proceso, y de forma acelerada. Es el mundo entero el que ha descubierto la fórmula del cambio reproductivo. Nuestra ventaja no es tener más nacimientos y más baratos, sino cuidar con elevados estándares los que tenemos y que vivan más que en ningún otro país. Por cierto, no

es porque lo planifique así ningún Estado, pero los países demográficamente avanzados atraen inmigración, y mucha, y no hace falta pensar en ejemplos clásicos como EE.UU. España, un país de emigración en toda su historia documentada, pasó al saldo positivo al empezar el siglo XXI, y llegó a recibir 1,2 millones de inmigrantes sólo en el 2007, antes del desplome del mercado laboral. Como la fecundidad mundial disminuye rápidamente y los tiempos de la explosión demográfica llegan a su fin, probablemente seguidos de un reajuste a la baja de la población mundial, cada día va a ser más importante esa capacidad de atracción, que ya hace décadas que explica que países como Alemania no disminuyan en habitantes.

El fetiche del número conveniente de nacimientos, que no alcanzamos y que hace peligrar todo, no sólo es un error analítico, sino que evidencia concepciones trasnochadas sobre el papel de la demografía en la política, cuyo paroxismo se alcanzó entre las dos guerras mundiales. La población no puede volver a ser de nuevo un objeto a mayor gloria de los estados, sino el sujeto al cual deben servir. Habría que recordárselo a todo político que reclama moralidad y altruismo para aumentar la natalidad, combatir el envejecimiento demográfico y garantizar la mano de obra futura, mientras recorta gasto social o educativo y permite la concentración creciente de riqueza en unas pocas manos. La única política de población que ha dado resultado hasta ahora ha sido, precisamente, ayudar a las personas a mantener el enorme esfuerzo que nos ha traído hasta esta privilegiada situación demográfica; ayudar a las familias a dotar mejor a los hijos que ya tienen, ayudar a los jóvenes para no depender tantísimo de las familias, ayudar a los que cuidan, para no verse sobrecargados de trabajo y de estrés. Esa es la política de población que merece un país en el que las generaciones anteriores se han dejado la piel para elevarnos hasta la cabeza mundial de la esperanza de vida.

Qué gran paradoja si junto al discurso natalista, moralista y pontificante que hoy se propaga por políticos y medios de comunicación, se sigue promoviendo el trabajo temporal, vendiendo la vivienda social a fondos buitres que expulsan a sus inquilinos, permitiendo los desahucios masivos, poniendo trabas a la inmigración y a la acogida de refugiados, recortando pensiones, desinvertiendo en educación o en sanidad. La demografía ya ha cambiado el mundo, de un modo que sólo cabe calificar como progreso. A quien hay que temer es a los que no se han enterado.

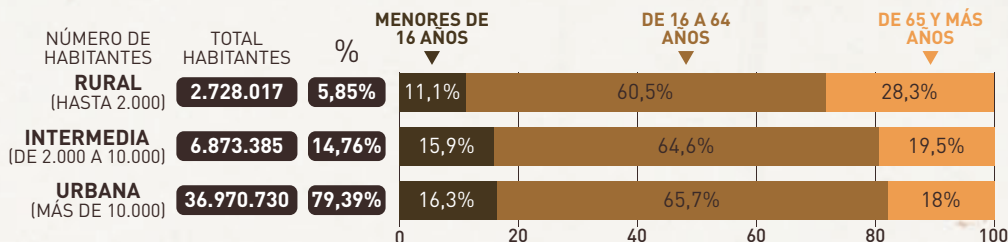
La fecundidad de reemplazo, 2,1 hijos por mujer, es un mito. El reemplazo depende del balance entre nacimientos y años de vida. La reproducción era más precaria en España cuando se tenía un promedio de 4,5 hijos que hoy

LA ESPAÑA DE LOS MAYORES

Según las previsiones de la ONU, España será el segundo país más envejecido del mundo, detrás de Japón, con el 41,9% de la población de 60 o más años en 2050. Su pirámide de edad, como la mayoría de países europeos, pasará de piramidal a cilíndrica (véase pág. 42). Aquí ofrecemos una ojeada a la situación actual del país por lo que respecta a la población mayor, por municipios y autonomías, en las que indicamos las pensiones medias, además de la evolución y proyecciones de los principales datos demográficos, proporciones de población mayor y diferencias por sexo.

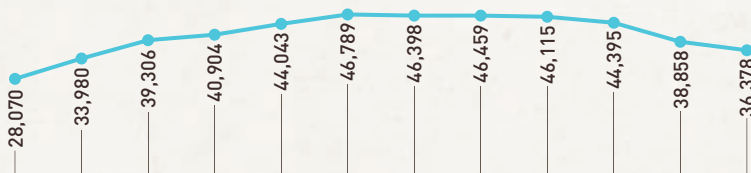
• LA ESPAÑA RURAL PIERDE POBLACIÓN

En 2017 la población de municipios hasta 2.000 habitantes representaba el 5,85% de toda la población española (lejos del 11% de 1970). También pierden población los municipios intermedios. Esta es la fotografía de ese año con el porcentaje según el tamaño de los municipios y luego, en cada tipo, la proporción según grandes franjas de edad.

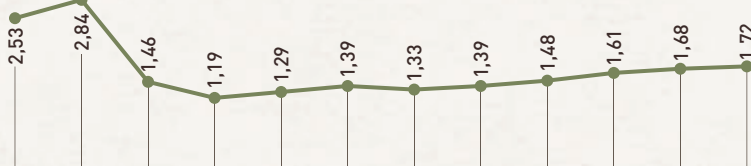


• EVOLUCIÓN DATOS DEMOGRÁFICOS BÁSICOS Y PROYECCIÓN FUTURA

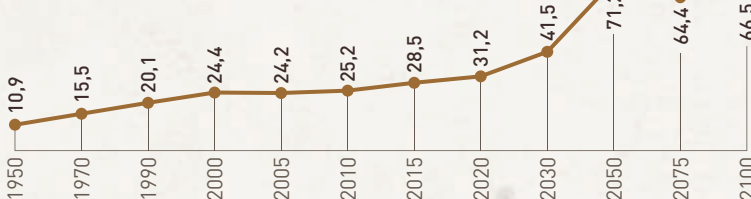
MILLONES DE HABITANTES



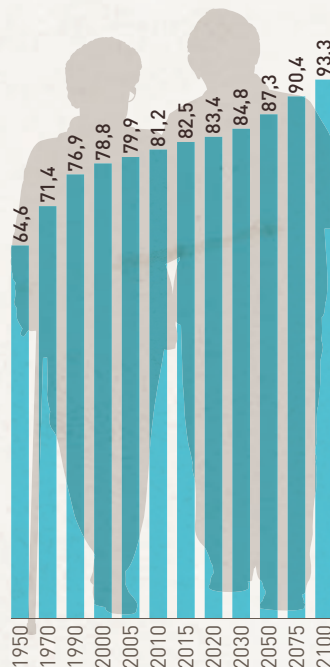
FERTILIDAD¹



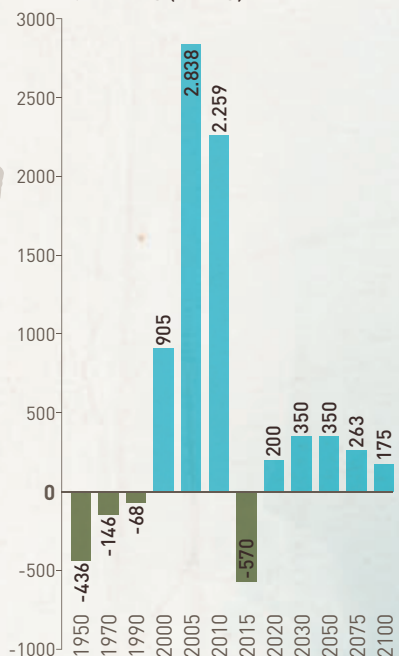
ÍNDICE DE DEPENDENCIA DE LA TERCERA EDAD²



ESPERANZA DE VIDA



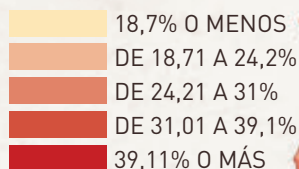
NÚMERO NETO DE MIGRANTES (MILES)



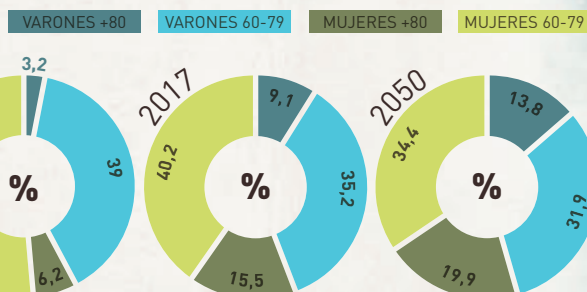
1- Nacimientos vivos por mujer. 2- Personas de 65 años o más por cada cien personas entre 15 y 64 años.

FUENTES: 'World Population Prospects: The 2017 Revision' y 'World Population Ageing 2017', ambos de la División de Población, Departamento de Asuntos Económicos y Sociales de la ONU; INEBASE, Instituto Nacional de Estadística; y la plataforma cooperativa Envejecimiento en Red, EnR.

• POBLACIÓN DE 65 AÑOS O MÁS POR MUNICIPIOS (2017)



• EVOLUCIÓN DE LA POBLACIÓN MAYOR POR SEXO Y EDAD



• EVOLUCIÓN DE LA POBLACIÓN DE 65 AÑOS O MÁS (1981-2066)

AÑO	TOTAL ESPAÑA (ABSOLUTO)	65 AÑOS O MÁS	% RESPECTO AL TOTAL	65-79 AÑOS	% RESPECTO AL TOTAL	80 AÑOS O MÁS	% RESPECTO AL TOTAL
1981	37.683.362	4.236.740	11,2%	3.511.599	9,3%	725.151	1,9%
1991	38.872.268	5.370.252	13,8%	4.222.384	10,9%	1.147.868	3%
2001	40.847.371	6.958.516	17%	5.378.194	13,2%	1.580.322	3,9%
2011	46.815.916	8.116.347	17,3%	5.659.442	12,1%	2.456.908	5,2%
2017	46.572.132	8.764.204	18,8%	5.920.334	12,7%	2.843.870	6,1%
2026	46.164.577	10.469.416	22,7%	7.251.921	15,7%	3.217.495	7%
2036	45.585.655	13.031.904	28,6%	8.909.069	19,5%	4.122.835	9%
2046	44.787.907	15.365.165	34,3%	9.752.713	21,8%	5.612.452	12,5%
2056	43.225.660	15.307.598	35,4%	8.230.106	19%	7.077.491	16,4%
2066	41.068.643	14.193.395	34,6%	6.739.017	16,5%	7.400.378	18%

TOTAL ESPAÑA (ABSOLUTO)

65 AÑOS O MÁS

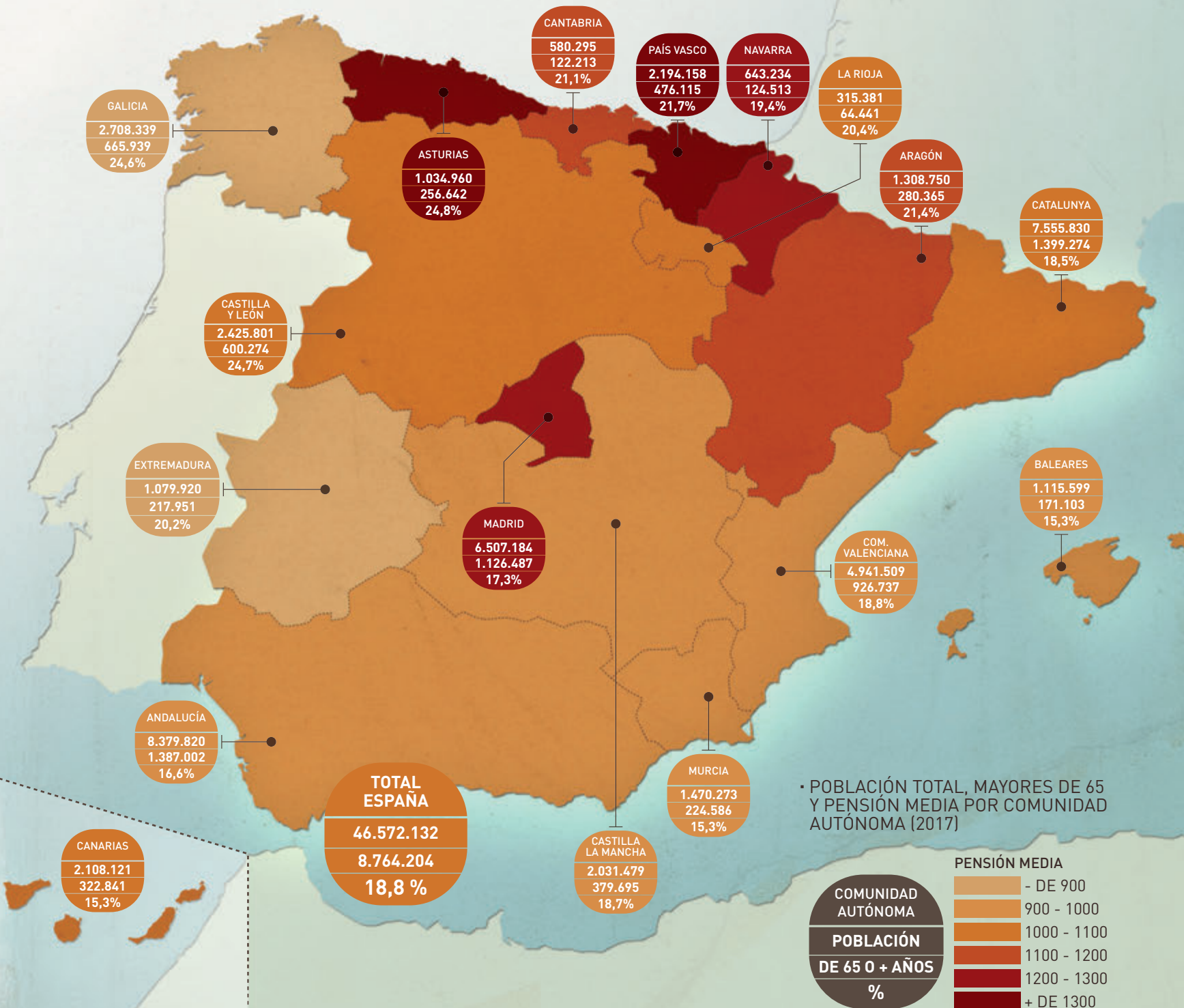
65-79 AÑOS

80 AÑOS O MÁS

ABSOLUTO % RESPECTO AL TOTAL

000

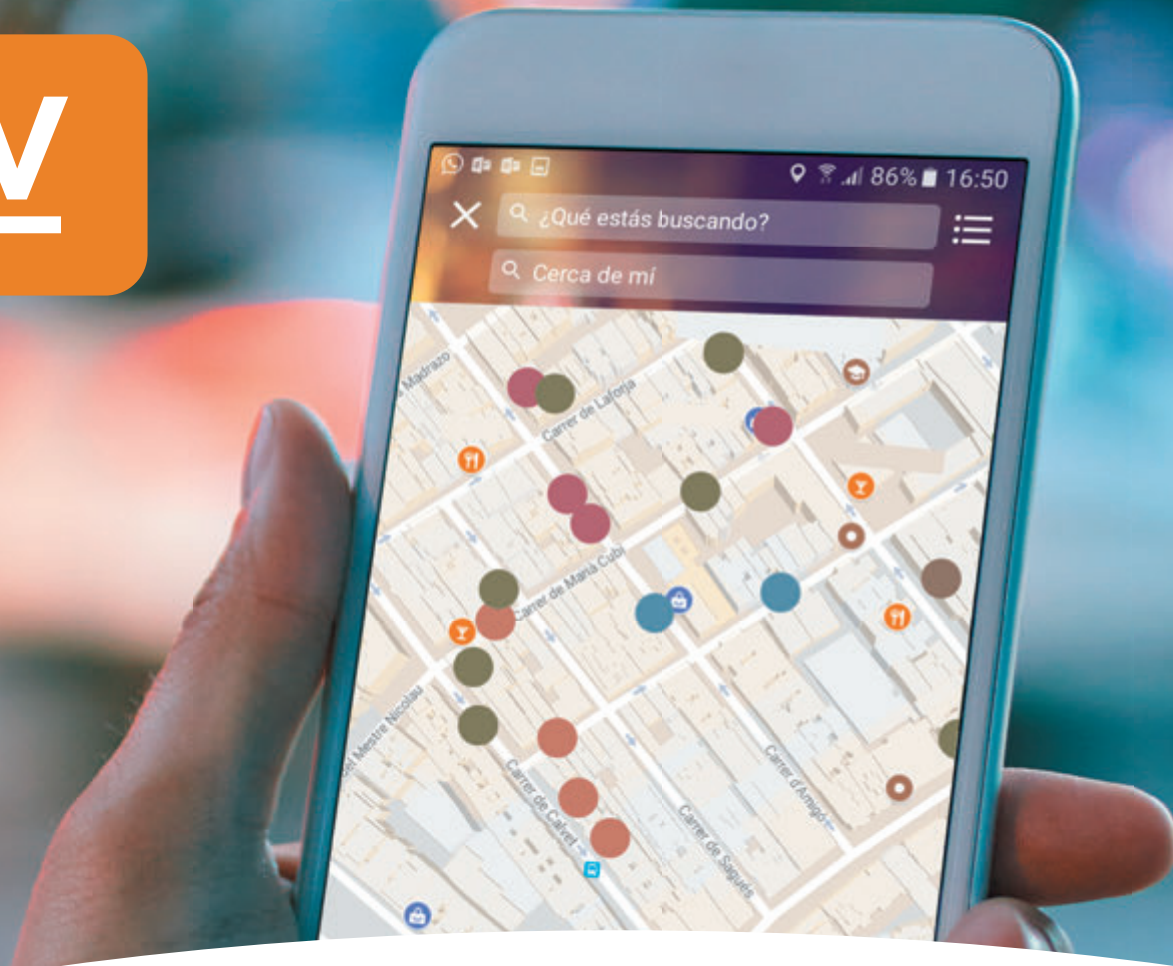
%



PENSIÓN MEDIA

- DE 900
- 900 - 1000
- 1000 - 1100
- 1100 - 1200
- 1200 - 1300
- + DE 1300

COMUNIDAD AUTÓNOMA
POBLACIÓN DE 65 O + AÑOS
%



Descárgate la **app Club Vanguardia** y **aprovecha** todas sus ventajas

En la **app Club Vanguardia** encontrarás más de 1.000 propuestas exclusivas: restaurantes -20%, cines 2x1, vuelos -20€, espectáculos -20%, museos gratis...

¡Descárgala gratis ahora!



App Club Vanguardia



LA VANGUARDIA

V CLUB VANGUARDIA

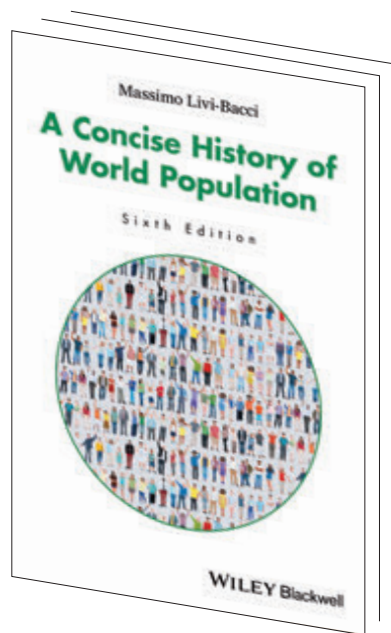


para saber más

literatura
cine
viajes
webs

libros

EL CRITERIO DE SELECCIÓN DE LOS LIBROS QUE COMPONEN ESTA LISTA SE CIÑE SÓLO A UNA PEQUEÑA PARTE DE LOS MÚLTIPLES TEMAS QUE TRATA LA DEMOGRAFÍA. HEMOS ESCOGIDO AQUELLOS TRABAJOS QUE, SIN RENUNCIAR AL RIGOR CIENTÍFICO, VAN DIRIGIDOS A LA DIVULGACIÓN DE CONTENIDOS DEMOGRÁFICOS: EL FUTURO DE LA POBLACIÓN Y LOS FENÓMENOS DEMOGRÁFICOS; LA RELACIÓN POBLACIÓN, RECURSOS Y MEDIO AMBIENTE; LAS MIGRACIONES Y LA GLOBALIZACIÓN; LA MORTALIDAD; LA HISTORIA DE LA FAMILIA; EL IMPACTO DEL CAMBIO CLIMÁTICO SOBRE LAS MIGRACIONES; LAS DISTOPÍAS DEMOGRÁFICAS; LA GEOGRAFÍA DE LA POBLACIÓN, Y LAS TRANSFORMACIONES POBLACIONALES DE ASIA.



A concise history of world population

MASSIMO LIVI-BACCI. WILEY-BLACKWELL, LONDRES, 2017. 312 PÁGINAS.

El libro que encabeza esta selección es un clásico moderno de la demografía. El autor, Massimo Livi-Bacci, es profesor de la Universidad de Florencia y uno de los más prestigiosos demógrafos del mundo. La aparición reciente de la 6.ª edición en inglés es una muestra de la buena salud que goza el texto tras sucesivas actualizaciones y casi treinta años de vigencia. El libro aborda dos cuestiones básicas: con el tiempo, ¿cuáles son los factores que determinan el crecimiento demográfico? y ¿cómo se mantiene el complicado equilibrio entre los recursos y el medio ambiente? Preguntas a las que da respuestas examinando los patrones del crecimiento de la población a lo largo del tiempo derivados de la relación población-recursos, los efectos de las guerras, las enfermedades, la tecnología, las migraciones y la cultura. En esta edición aparecen nuevas secciones que analizan el impacto del cambio climático y ambiental, la disminución de la fecundidad en los países en desarrollo de Asia y América Latina, el impacto del sida. Un libro que aborda de forma amena y rigurosa las complejas relaciones históricas entre población y medio ambiente desde las sociedades de cazadores-recolectores hasta la actualidad.

Joaquín Recaño Valverde. Profesor titular de Geografía Humana, departamento de Geografía (Universitat Autònoma de Barcelona) e investigador asociado del Centre d'Estudis Demogràfics.

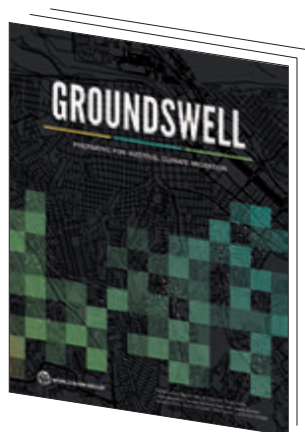


Los límites del crecimiento, 30 años después

DENNIS MEADOWS, JORGEN RANDERS Y DONELLA MEADOWS.
GALAXIA GUTENBERG, BARCELONA, 2006, 514 PÁGINAS.

No podemos continuar el relato de la compleja relación entre población, recursos y medio ambiente sin referirnos a uno de los textos iniciáticos, ahora actualizado. En 1972, científicos del MIT, por encargo del Club de Roma, crearon un modelo informático que analizaba el consumo y la producción de recursos a escala mundial. Sus resultados tuvieron un gran impacto en la academia y la opinión pública y ayudaron al nacimiento de la conciencia ecologista. Treinta años después los mismos autores renuevan y amplían los hallazgos originales, ofrecen un análisis de las tendencias presentes y futuras en el uso de los recursos, y evalúan una variedad de resultados posibles. Con un texto menos pesimista que el original, los autores muestran diversas razones para creer que la humanidad aún puede revertir parte de su daño a la Tierra

si toma las medidas apropiadas para reducir la ineficiencia y el derroche de los recursos.



Groundswell: Preparing for Internal Climate Migration

VARIOS AUTORES. WORLD BANK, WASHINGTON DC. DISPONIBLE EN LA WEB.

Este informe del Banco Mundial aborda el impacto del cambio climático en las migraciones internas de tres regiones del mundo: África subsahariana, Asia meridional y América Latina, que suman un 55% de la población de los países en vías de desarrollo. Si no se aplican medidas de desarrollo y la evolución del cambio climático sigue las pautas aceptadas por la comunidad científica (crecimiento de las temperaturas, aumento del nivel del mar y menores disponibilidades de agua por la prolongación de las sequías), de aquí al 2050 las alteraciones climáticas provocarán el éxodo interno de casi 150 millones de personas. La aparición en este período de “episodios críticos” de migración climática dispararán el gasto futuro de las infraestructuras y sistemas de ayuda social.

Contemporary Demographic Transformations in China, India and Indonesia

CHRISTOPHE Z. GUILMOTO Y GAVIN W. JONES (EDS.). SPRINGER INTERNATIONAL PUBLISHING SWITZERLAND, CHAM (ZURICH), 2016, 342 PÁGINAS.

Esta obra colectiva examina la profunda transformación demográfica que afecta a China, India e Indonesia, donde vive un 40% de la población mundial. El libro se divide en cinco partes y 22 capítulos en el que para cada país se ofrece un estudio sistemático de la mortalidad, fecundidad, educación, migración y envejecimiento que ayudará a los lectores a comprender mejor los cambios sociales de la población de esos espacios. Los autores subrayan que las evoluciones demográficas recientes de los tres gigantes demográficos de Asia son lineales en la mortalidad y fecundidad, pero la evolución de la migración interna estrechamente vinculada con los cambiantes escenarios económicos de la región, constituirá el mayor desafío al conocimiento demográfico de ese espacio geográfico en las próximas décadas.

The age of migration: International Population Movements in the Modern World

STEPHEN CASTLES, HEIN DE HAAS Y MARK J. MILLER. THE GILFORD PRESS, NEW YORK-LONDON, 2013, 401 PÁGINAS.

Un libro que ofrece una perspectiva global sobre las mi-

graciones internacionales y reivindica la importancia del fenómeno migratorio en las sociedades del siglo XXI. Los autores muestran sus múltiples dimensiones en un mundo globalizado, identificando los elementos comunes que caracterizan a esos movimientos en la actualidad: aumento del número de países de origen y destino; crecimiento continuo de los migrantes a pesar de las restricciones impuestas por las políticas migratorias; y progresiva feminización de los flujos. La migración se ha convertido en el centro de la agenda política de los países receptores afectando a la política nacional, las relaciones bilaterales y regionales. En esta 5.ª edición se aborda el impacto de la crisis económica mundial desde el 2008, los efectos del cambio climático en las migraciones y la seguridad y la aparición de distintos tipos de migración laboral, migración matrimonial y la emergencia de nuevas áreas de origen, tránsito y destino.

World Population & Human Capital in the Twenty-First Century

WOLFGANG LUTZ, WILLIAM P. BUTZ Y K.C. SAMIR KC (EDS.). OXFORD UNIVERSITY PRESS, OXFORD, 2014, 1056 PÁGINAS.

Wolfgang Lutz, director del Wittgenstein Centre for Demography and Global Human Capital de Viena, encabeza esta obra colectiva que aborda el papel de la educación en la evolución demográfica de la población mundial. Ofrece un examen exhaustivo de las tendencias de la fecundidad, mor-

talidad, migración y educación. Con la información precedente y una encuesta global dirigida a cientos de expertos los autores han elaborado proyecciones de población con escenarios alternativos para todos los países del mundo entre el 2010 y el 2100. El producto final es una original e inédita proyección por edad, sexo y nivel educativo que demuestra que la incorporación de la educación según la edad y el sexo altera sustancialmente los resultados y la forma en la que percibimos el futuro de la población mundial. Un apéndice y un enlace web asociado presentan los resultados detallados para todos los países.

Descenso literario a los infiernos demográficos

ANDREU DOMINGO. ANAGRAMA. BARCELONA, 2008. 380 PÁGINAS.

Esta contribución del demógrafo y escritor Andreu Domingo, subdirector del Centre d'Estudis Demogràfics, fue finalista en el 2008 del premio Anagrama de Ensayo. Se trata de una documentada y amena descripción de la relación entre literatura y demografía a través de las denominadas *demodistopías*, aquellas novelas que imaginan sociedades presentes o futuras, en las que la evolución de la dinámica poblacional conlleva situaciones sociales y políticas indeseables. Los temas demográficos más comunes que generan estas distopías son el miedo a la explosión demográfica, el aumento de la longevidad humana, el declive continuado de la fecundidad y el crecimiento de los flujos migratorios internacionales. Su repaso de las relaciones entre

demografía y literatura abarca clásicos como *Un mundo feliz* de Huxley, 1984 de Orwell y novelas de autores contemporáneos como Saramago, Houellebecq o Maalouf, sin olvidar los clásicos del género distópico de los años cincuenta y sesenta como *Fahrenheit 451* de Ray Bradbury.



La conquista de la salud Mortalidad y modernización en la España contemporánea

VICENTE PÉREZ MOREDA, DAVID SVEN REHER Y ALBERTO SANZ GIMENO. MARCIAL PONS, MADRID, 2015. 476 PÁGINAS.

España se caracterizaba a principios del siglo XX por unos indicadores de mortalidad entre los más elevados del continente. Cien años más tarde se situaba entre los de mayor esperanza de vida del mundo. Este cambio constituye el más importante logro del proceso de modernización de la sociedad española en el siglo XX. Este libro, elaborado por prestigiosos expertos en demografía histórica española de la Universidad Complutense, de Madrid contiene un detenido análisis y medición de la evolución de la mortalidad española

por edades, sexos y causas de defunción a lo largo de los primeros sesenta años del siglo XX, integrando los avances que ha proporcionado la demografía histórica, la historia económica y social, la antropometría o la historia de la medicina al estudio de la evolución de la salud de los españoles en el siglo XX.

Les populations du monde

GÉRARD-FRANÇOIS DUMONT. ARMAND COLIN, PARÍS, 2004. 288 PÁGINAS.

Gerard-François Dumont, profesor de la Universidad de París-Sorbona, ofrece en este libro una sintética visión geográfica de la evolución y distribución de la población en las grandes regiones del planeta. El autor señala que en muy pocos años se ha registrado una extrema variedad de ritmos de crecimiento que oscilan, por una parte, entre una Europa que completó su transición demográfica hace ya muchos años y envejece a marchas forzadas y, por otra, un África subsahariana que conserva una alta fecundidad y un elevado potencial de crecimiento, a pesar de los estragos producidos por el sida. Este libro muestra la variedad de tendencias y diferencias espaciales en el movimiento natural y movimiento migratorio de la población. Por lo tanto, cumple con dos objetivos: nos proporciona un sólido conocimiento de las etapas de crecimiento demográfico y ocupación de los diferentes territorios del planeta y nos permite comprender las variaciones espacio-temporales de los ritmos demográficos.



Familias: Historia de la sociedad española (del final de la edad media a nuestros días)

FRANCISCO CHACÓN Y JOAN BESTARD (DIRS.). CÁTEDRA, MADRID, 2011. 1.248 PÁGINAS.

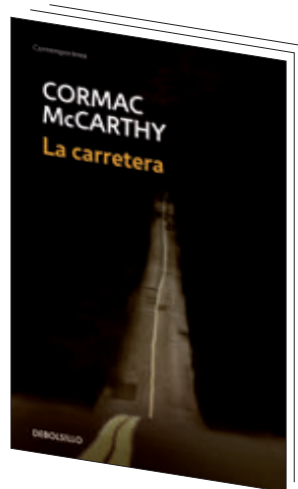
Esta monumental obra de referencia sobre la familia española es el trabajo conjunto de un notable número de historiadores, sociólogos, antropólogos, expertos en derecho, geógrafos y demógrafos dirigidos por Francisco Chacón (Universidad de Murcia) y Joan Bestard (Universitat de Barcelona). Se examinan desde diversas ópticas de análisis las peculiaridades de la familia española en dos grandes etapas históricas: de la edad media a la puesta en marcha del Código Civil de 1889 y desde 1889 hasta la actualidad. La familia en España constituye, según los autores, el núcleo básico del sistema socio-político y cultural, con fuertes implicaciones en el ámbito económico y social. Sigue siendo una institución altamente valorada y ha desarrollado una extraordinaria capacidad de adaptación a diversas circunstancias históricas.



De vidas ajenas

EMMANUEL CARRÈRE. ANAGRAMA, BARCELONA, 2013. TRADUCCIÓN DE JAIME ZULAIKA. 264 PÁGINAS

Uno de los mejores narradores contemporáneos, en cada nuevo libro que lanza, y con cada nuevo e incisivo tema que toca, el francés Emmanuel Carrère emprendió con este espléndido libro de no ficción, *De vidas ajenas*, de raíz netamente autobiográfica, compuesto por un puzzle de historias auténticas, a cual más emocionante y desgarradora, un hiperrealista tapiz de vidas y existencias corrientes del primer mundo. Existencias jalonadas por una sucesión ininterrumpida de pérdidas, de dolor, de pobreza extrema, de enfermedades, de injusticias y lucha infatigable por salir adelante. O, si se prefiere, de empobrecimiento acelerado de las clases medias. Pero Carrère también expone los numerosos ejemplos de amor, de solidaridad, de callados heroísmos y de dignidad cotidiana con los que muchos seres anónimos se defienden a diario y se apoyan entre sí. En pocos meses de intervalo el autor se enfrentó, de forma cercana, a dos sucesos inasumibles por mucha gente: la muerte de un niño para unos padres y la de una mujer joven para sus hijos y su marido. Ese fue el origen de todo. De forma paralela, se acercó –y narró de forma extraordinaria– a la amistad entre un hombre y una mujer, los dos sobrevivientes de un cáncer, los dos jueces (el personaje del juez Étienne Rigal es de lo mejor del libro) que se ocupan, con una inmensa humanidad e implicación personal, de duros casos de desahucios y de sobreendudamiento familiar en un juzgado de provincias.



La carretera

CORMAC MCCARTHY. DEBOLSILLO, BARCELONA, 2016. TRADUCCIÓN DE LUIS MURILLO. 216 PÁGINAS.

Desasosegante fábula que tiene de trasfondo un apocalíptico futuro del ser humano, *La carretera*, ganadora del premio Pulitzer 2007, es la novela más famosa del gran autor estadounidense Cormac McCarthy. La acción transcurre en la inmensidad del territorio

norteamericano, en un paisaje literalmente quemado por lo que parece haber sido un reciente holocausto nuclear. Un mundo donde llueve ceniza y en el cual un padre emprende un largo viaje con su hijo. Rodeados de un paisaje baldío, amenazados por bandas de caníbales, empujando un carrito de la compra donde guardan sus escasas pertenencias, recorren los lugares donde el padre pasó una infancia recordada a veces en forma de breves bocetos del paraíso perdido, mientras avanzan hacia el sur, hacia el mar, huyendo de un frío “capaz de romper las rocas”.

El ministerio de la felicidad suprema

ARUNDHATI ROY. ANAGRAMA, BARCELONA, 2017. TRADUCCIÓN DE CECILIA CERIANI. 512 PÁGINAS.

El ministerio de la felicidad suprema significó el regreso a la narrativa de la mundialmente



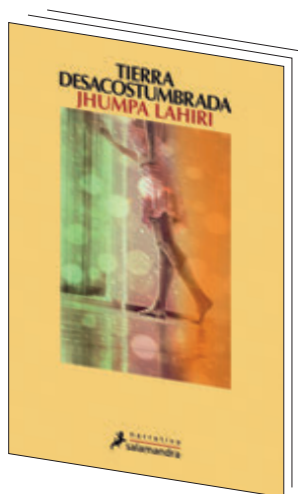
apasionante viaje íntimo de muchos años por el subcontinente indio, de los barrios masificados de la vieja Delhi y las carreteras de la ciudad nueva a los montes y valles de Cachemira y más allá.

Tierra desacostumbrada

JHUMPA LAHIRI. SALAMANDRA, BARCELONA, 2010. TRADUCCIÓN DE EDUARDO IRIARTE. 352 PÁGINAS.

famosa autora de *El dios de las pequeñas cosas*, novela con la que ganó el premio Booker en 1997, traducándose a más de cuarenta idiomas. Arquitecta de formación, desde entonces se implicó como activista en numerosos proyectos relacionados con la ecología y el desarme nuclear. También en la escritura de combativos ensayos políticos como *El final de la imaginación* o *El álgebra de la justicia infinita*. En esta ocasión la autora nos embarca en un

Los relatos de Lahiri –que suelen girar en torno a las vivencias de las familias de ascendencia bengalí en Estados Unidos, así como en torno al exilio y la identidad– no se detienen meramente en plasmar la experiencia de la inmigración, sino que retratan con gran fidelidad las vivencias y emociones de amplios sectores de la sociedad moderna. Una de las mejores escritoras de estos momentos, en sus historias una variada galería de perso-



najes (hermanos y hermanas, padres e hijos, maridos y mujeres, amigos y amantes) se ven obligados a afrontar momentos fundamentales en sus relaciones, entre los dictados de la remota tradición familiar y la emancipación personal, reinventándose sin cesar y teniendo que definir su identidad en un mundo fragmentado.

El sueño de la aldea Ding

YAN LIANKE. AUTOMÁTICA EDITORIAL, MADRID, 2013. TRADUCCIÓN DE BELÉN CUESTA MORA. 376 PÁGINAS.

Autor de la celebrada novela satírica *Los besos de Lenin*, Yan Lianke es de los mejores escritores chinos actuales. Narrada por el pequeño Xiao Qiang, *El sueño de la aldea Ding*, de una sobrecogedora belleza, nos adentra en la historia de la aldea Ding, una de tantas afectadas por el escándalo de la sangre contaminada de la provincia china de Henan. Los aldeanos, incitados a vender grandes cantidades de su propia sangre, con la que se enriquecieron



unos pocos, son ahora víctimas de la mayor epidemia conocida en el país. Abandonados e ignorados por las autoridades, sólo pueden esperar la llegada de la muerte.



Volver a casa

YAA GYASI. EDITORIAL SALAMANDRA, BARCELONA, 2017. TRADUCCIÓN DE MAIA FIGUEROA EVANS. 384 PÁGINAS.

Yaa Gyasi, escritora de origen ghanés-americano, traza tres siglos de la historia de varias ramas de una familia afroamericana en una estupenda primera novela, *Volver a casa*.

Como se dice en esta obra, la esclavitud es una herida abierta, una aberración, que nunca sanará. Desde las guerras tribales, el negocio del cacao, la llegada de los misioneros, la ley de Esclavos Fugitivos de 1850, la gran migración negra, la lucha por los derechos civiles y el renacimiento de Harlem en los años veinte, hasta llegar a la epidemia de heroína de los setenta, una sucesión de apasionantes historias se encadenan en esta magnífica obra coral.

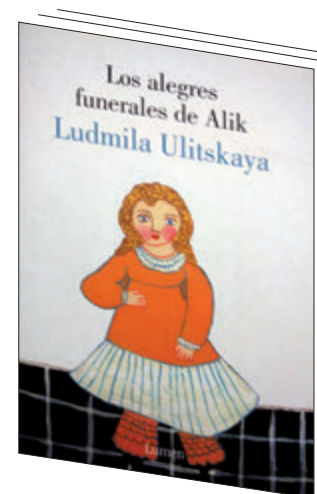


Amores imperfectos

HIROMI KAWAKAMI. ACANTILADO, BARCELONA, 2017. TRADUCCIÓN DE MARINA BORNAS MONTAÑA. 144 PÁGINAS.

Una de las escritoras japonesas más leídas en la actualidad, Hiromi Kawakami (Tokio, 1958), fue profesora de biología hasta que en 1994 apareció su primera novela. Con una prosa exquisita, sus historias hablan de forma concisa, sobria y sutil del Japón contemporáneo y de sus distintas generaciones y segmentos sociales. Este es el caso del conjunto de relatos

Amores imperfectos, en los que esta excelente autora, como en otros libros suyos, se revela como una maestra a la hora de retratar las relaciones de pareja en la sociedad japonesa. Un amor, como sucede con otros grandes autores japoneses contemporáneos, desde Murakami a Tanizaki, vivido muchas veces desde un vértigo desesperado, con una mezcla de odio y pasión.



Los alegres funerales de Alik

LIUDMILA ULÍTSKAYA. LUMEN, BARCELONA, 2003. TRADUCCIÓN DE VÍCTOR GALLEGRO. 224 PÁGINAS.

Una de las voces más internacionales de la literatura contemporánea rusa, Ulítskaya, retrata en esta novela a un grupo de extravagantes personajes, reunidos en un destartalado apartamento de Nueva York, para acompañar a su amigo Alik en los últimos días de su vida. Lo mismo que Tolstói hizo en su obra maestra *La muerte de Ivan Ilich* descubrimos en Alik la esencia de la tierra rusa, que se muestra con humor e ironía, en el momento en que la Unión Soviética deja de existir.

Un mundo a otra escala

UNA VIDA A LO GRANDE. TÍTULO ORIGINAL: _____
DOWNSIZING. ESTADOS UNIDOS, 2017. DIRECTOR: _____
ALEXANDER PAYNE. INTÉRPRETES: MATT DAMON, _____
HONG CHAU, CHRISTOPHER WALZ. _____

El punto de partida de la fábula resulta ingenioso. El mundo se encuentra al límite. La explosión demográfica ha reducido el uso de los recursos energéticos, las ciudades están superpobladas y la humanidad se halla al borde del apocalipsis. Un científico noruego propone una solución: miniaturizar una parte de la población para lograr un consumo menor y más equilibrado. Los humanos pueden prestarse voluntariamente a una reducción de tamaño, pero como contrapartida abandonarán las grandes megalópolis para poder vivir en sofisticados paraísos artificiales. La ciudad de Ocioland para los diminutos es una especie de ensoñación pequeño burguesa donde el sueño del consumo razonable es posible. El precio a pagar es la alienación.

Alexander Payne, director de *Entre copas* y *Nebraska*, construye una fábula distópica sobre un hombre que decide reducir su cuerpo. Una vez situado en Ocioland se da cuenta de que en la nueva sociedad continúan exis-



Matt Damon, interpretando a Paul Safranek, habla con un amigo de la universidad ya miniaturizado.

tiendo problemas de racismo y de alteridad, que los males se reproducen a pequeña escala e que incluso en la hipotética sociedad perfecta se persigue a los refugiados y a los emigrantes económicos. La solución que se planteará es la búsqueda hasta el límite de otros paraísos y otras utopías imposibles.

Una vida a lo grande brilla por la calidad de sus efectos especiales centrados en la habilidad de contrastar el mundo de los

seres *normales* situado al borde del conflicto y el mundo pequeño en el que los gastos parecen ser muy inferiores. A partir de la premisa inicial, Alexander Payne repasa la mayoría de los males sociales que afectan a la actualidad. La premisa no es la distopía orweliana de la sociedad hipercontrolada, sino la de Aldous Huxley de un mundo feliz en el que la apariencia de felicidad esconde la destrucción de todo posible humanismo.

La humanidad infértil

HIJOS DE LOS HOMBRES. TÍTULO ORIGINAL: _____
CHILDREN OF MEN. ESTADOS UNIDOS, 2006. _____
DIRECTOR: ALFONSO CUARÓN. INTÉRPRETES: CLIVE OWEN, JULIANNE MOORE Y MICHAEL CAINE _____

Estamos en el año 2027, el mundo se ha vuelto infértil y fallece el ser más joven de la tierra, un joven de 18 años. La sociedad vive un extraño sentimiento de lento apocalipsis, de fin programado e irreversible. Londres se ha convertido en un territorio en guerra permanente. La población vive sumergida en una violencia continua, con múltiples atentados terroristas. La sociedad está militarizada y los pequeños grupúsculos de activistas luchan para conseguir unos ciertos derechos sociales en medio

de un universo donde esto ya no es posible. Algunos emigrantes llegan a la capital del Reino Unido escapándose de otros países en los que el clima de destrucción es todavía mucho mayor.

Alfonso Cuarón, director de *Gravity*, se consolidó como una promesa del cine hollywoodiense con esta fábula sobre un futuro infértil adaptada de una novela de P.D. James. El punto de partida inicial se complica a partir del momento en que la trama se centra en la relación del activista protagonista –Clive Owen– con una joven mujer emigrante que se esconde. En el interior de su vientre está el germen que puede llegar a salvar a la humanidad del desastre programado. El embarazo de esta mujer puede alterar las leyes de

este mundo sumido al borde de la destrucción y abrir determinadas vías de esperanza. Alfonso Cuarón empieza la película con una descripción pesimista de un mundo futuro hecho a escala del presente, en el que el problema de la infertilidad comporta un deterioro progresivo de las relaciones humanas. A partir de un momento, la lucha para preservar a la mujer embarazada surge como una especie de posible renacimiento utópico. En medio de las tinieblas y la desesperación, la luz de un posible nacimiento genera nuevas perspectivas. El mensaje de regeneración aparece acompañado de una serie de reflexiones pseudorreligiosas en torno a los conceptos de fe y redención de la humanidad.

Alimentar las ciudades superpobladas

CUANDO EL DESTINO NOS ALCANCE. TÍTULO ORIGINAL: SOYLENT GREEN. ESTADOS UNIDOS, 1973. DIRECTOR: RICHARD FLEISHER. INTÉRPRETES: CHARLTON HESTON, EDWARD G. ROBINSON, LEIGH TAYLOR-YOUNG.

En los años de la guerra fría, se extendió en Estados Unidos la idea de que determinados países del Este estaban creando grandes ciudades superpobladas que constituirían una amenaza para Occidente y que generarían graves problemas de alimentación. El novelista Harry Harrison partió de esta idea para construir en 1966 su libro, *¡Hagan sitio! ¡Hagan sitio!*, que inspiró un clásico de culto del cine de ciencia ficción, *Cuando el destino nos alcance* de Richard Fleisher.

En esta ocasión estamos en el año 2022, la ciudad de Nueva York está habitada por 40 millones de personas, separadas en estratos sociales y controlada por una élite que mantiene el control de los alimentos. Ante la crisis de los alimentos básicos, la mayoría de la población se alimenta con los llamados Soylent, un producto hecho a base de plantas. Este factor crea un importante déficit alimentario. La película, de marcado sustrato ideológico, se centra en la investigación de un policía –Charlton Heston– que descubre que los océanos se están muriendo y que la alimentación se está llevando a cabo a partir del reciclaje de restos humanos. La película fue uno de los primeros alegatos de Hollywood a favor de la preservación del planeta.

Bajo el control genético

GATTACA. ESTADOS UNIDOS, 1997. DIRECTOR: ANDREW NICOL. INTÉRPRETES: ETHAN HAWKE, UMA THURMAN, JUDE LAW.

El universo distópico que nos propone *Gattaca* está basado en el control genético de las especies. Los biólogos pueden trabajar para la alteración del ADN celular para conseguir unos seres humanos casi perfectos sin enfermedades congénitas y en los que pueda manipularse raza, físico e inteligencia. En este mundo manipulado genéticamente, Andrew Nicol nos cuenta la historia de un joven que ha nacido por parto natural, sin ninguna manipulación genética, al que los médicos pronosticaron problemas cardíacos y una muerte prematura. Este joven tiene que enfrentarse a su hermano, criado artificialmente y cuya genética ha estado salvaguardada. Los hechos se complican cuando los pronósticos se rompen. El chico manipulado será menos inteligente que el que ha nacido biológicamente y este quiere entrar en el

universo perfecto de *Gattaca*. La fábula quiere advertir del peligro de un mundo perfecto sin azar, donde se elimine toda posibilidad de diferencia.



Vicent (Ethan Hawke) intenta demostrar que es tan válido como su hermano creado por manipulación genética.

Refugios de seres sedentarios

WALL-E. ESTADOS UNIDOS, 2008. DIRECCIÓN: ANDREW STANTON. ANIMACIÓN A CARGO DE PIXAR.

En el 2008, la compañía Pixar sorprendió con una fábula apocalíptica sobre los peligros de la alimentación proteica y de la vida sedentaria.

El protagonista es un robot llamado Wall-E que vive en medio de una tierra devastada. Su labor es recoger los restos de basura de un mundo que ha quedado desierto porque todos los humanos han sido evacuados. El problema de la superpoblación ha generado un exceso de basura que ha contaminado el planeta y lo ha hecho inhabitable. Los humanos han sido trasladados en grandes naves especiales donde han acabado ubicándose. A partir de la atracción que Wall-E

siente por un robot femenino –Eva– que ha viajado a la tierra para ver si existen residuos vivos, el robot viaja hasta el nuevo refugio de los humanos, que viven permanente sentados, que han engordado terriblemente y cuya masa ósea se está atrofiando. Realizada a partir de animación digital, la película es un alegato contra la degradación física y alimentaria de un planeta en el que las nuevas masas han perdido la noción de lo natural.

Genocidios de género

En 1995, diferentes cadenas de televisión estrenaron el documental producido por la BBC, *Las habitaciones de la muerte*. Dos reporteros llegaban a grabar en el interior de los orfanatos chinos con cámaras ocultas para denunciar el genocidio que se estaba produciendo con numerosas niñas, que no eran atendidas y desde pequeñas pasaban sus primeros años atadas en una silla. La política de control de natalidad del Gobierno chino afectaba a las niñas que no eran primogénitas. Este documental abrió el tema de los llamados *genocidios de género*, que acabaron desembocando en la producción en el 2012 del documental *It's a girl* de Evan Grae Davis que estaba focalizado tanto en China como en India. La periodista denunciaba cómo en ambos países muchas niñas son asesinadas o abandonadas al nacer por el simple hecho de ser niñas. El punto de partida era una denuncia de las Naciones Unidas contra la forma como las niñas no deseadas eran desatendidas y en algunos casos exterminadas. Las niñas que conseguían sobrevivir a la infancia se encontraban viviendo de jóvenes en condiciones precarias, ante situaciones de extrema violencia.

Josep Maria Palau Ribera *Periodista especializado en viajes y profesor de Comunicación de la Universitat Pompeu Fabra de Barcelona y del máster de la Organización Mundial del Turismo-UOC. Ganador del premio del Festival Internacional de Periodismo de Perugia 2018.*

KAMPALA Joven ciudad a orillas del lago Victoria



El lago Victoria –a cuyo borde se extiende la capital de Uganda Kampala– es uno de los atractivos de un país con la mitad de la población menor de 14 años. Euan Denholm | Reuters

Kampala, de noche, hierve de vida. Es algo que se intuye, más que se ve, porque la ciudad se sume en la oscuridad al anochecer, con oasis de luz puntuales donde siempre espera una sonrisa afable. Por eso, de día, sorprende la increíble extensión que ocupa, en buena parte con edificios muy sencillos. Es fácil observarlo desde cualquiera de las siete colinas que comprende el casco urbano, como Roma. Las apariencias pueden engañar, ya que a esta ciudad llegan cuantiosas ayudas a través de multitud de oenegés y otras vías institucionales, y además dispone de una buena universidad y un importante centro industrial, sobre todo de maquinaria, así como de productos para la exportación

como café o algodón. Montones de sacos que los contienen se amontonan a orillas del lago Victoria, en Port Bell, dispuestos a surcar las míticas aguas –descubiertas por el explorador John Hanning Speke– con rumbo a nuevos mercados. Por todo ello, no es de extrañar que sea un importante polo de atracción de la juventud, que busca mejores oportunidades. La tasa de natalidad también contribuye a incrementar la sensación de que todo el mundo es muy joven. Y así es: Uganda es el único país del mundo donde más de la mitad de la población tiene menos de 14 años.

La mayor parte del turismo llega atraído por los gorilas que viven en el bosque impenetrable de Bwindi, o por lugares tan ligados

a la exploración colonial de África como las cascadas de Murchison. Esto se traduce en una estancia muy corta en Kampala, que se convierte en una simple etapa inevitable del viaje. Ciertamente es que tampoco ofrece grandes atractivos, más allá de las tumbas de los antiguos reyes de Buganda o la muy relativa cercanía de las fuentes del Nilo Blanco. Eso sí, para visitar unas u otras, no hay más remedio que alquilar un *boda boda*, los moto-taxi de la ciudad, y rezar antes de sumergirse en su tráfico infernal. De noche, regresará la oscuridad y los motores amainarán. Y tomando una cerveza en una terraza, mientras se escucha el oleaje del lago Victoria, uno entenderá que tampoco se está tan mal.

Para visitar...

- Visitar las Kasubi Tombs, donde se hallan enterrados los fundadores del reino de Buganda. El lugar fue dañado por un incendio en el 2010, pero aún vale la pena.
- Acercarse a la mezquita Gaddafi National Mosque, donada por Muamar el Gadafi. Con capacidad para quince mil personas, cambió el nombre por el de Uganda National Mosque tras la muerte del coronel.
- Una excursión al Ngamba Island Chimpanzee Sanctuary, en el lago Victoria, una reserva de chimpancés.
- Ir hasta la vecina población de Jinja, donde nace el Nilo Blanco y pueden visitarse las cascadas de Bujagali.
- Descubrir todos los rincones de la ciudad a lomos de un boda boda. Hay empresas que se dedican a ello, y la media de prudencia de sus conductores es mayor.

DESSAU

La Bauhaus en la veterana Alemania

Dessau, o para ser más precisos, hoy en día Dessau-Rosslau, es la tercera ciudad en número de habitantes del land alemán Sajonia-Anhalt. Situada en la confluencia de los ríos Mulde y Elba, es famosa por sus inundaciones periódicas y por la escuela de arquitectura de la Bauhaus, que encontró ahí refugio después de que la obligaran a cerrar en Weimar, ya que el nazismo ascendente consideraba la modernidad y sus declinaciones como una forma de arte degenerado. Si bien quedó prácticamente destruida en la Segunda Guerra Mundial –lo que provocó después la proliferación de edificios impersonales propios de una ciudad industrial de la República Democrática Alemana–, también es cierto que la obra de la Bauhaus fue reivindicada tras la reunificación y hoy es patrimonio de la humanidad. Por eso, edificios del centro histórico como las Meisterhäuser brillan rejuvenecidos, gracias también a unos diseños que lucen tan contemporáneos hoy como ayer. En contraste, por las calles de Dessau transitan muchos ancianos,

gente mayor en una de las ciudades más envejecidas de Alemania y dentro de una región que ostenta las tasas más alarmantes al respecto. En realidad, todo el país está muy avejentado, según las estadísticas. Por suerte, muchos se mantienen en forma en Dessau gracias a una excelente red de carriles bici.



Una de las Meisterhäuser o casas de los maestros de la Bauhaus, en Dessau, una ciudad alemana con alta proporción de personas mayores de edad. Robert B. Fishman | Getty

Para visitar...

- [El Bauhaus Building, imprescindible para los amantes de la arquitectura moderna realizada a escala humana.](#)
- [Las Meisterhäuser o casas de los maestros, un conjunto así llamado porque alojó a los profesores de la Bauhaus, como Gropius, Moholy-Nagy, Klee o Kandinsky.](#)
- [El Georgium Park, un jardín con elementos barrocos y del paisajismo inglés que es parte del patrimonio cultural mundial. En su centro, una galería de arte.](#)
- [El Reino de los Jardines de Dessau-Wörlitz, un jardín inglés inspirado en los Kew Gardens o Stowe, así como en la obra del paisajista inglés Capability Brown.](#)

NEW DELHI

Miles de años de historia y de habitantes



Una tienda del Chawri Bazar de Dehli, cuyo bullicio ilustra el espectacular crecimiento demográfico de India, que en los próximos años superará a China como país más poblado del mundo. Stuart Freedman | Getty

Delhi es una de las ciudades más antiguas que existen, honor que comparte con Jerusalén y con otra urbe india, Varanasi. Más de cinco mil años de historia dan tanto como para haber sido destruida once veces, pero también para crecer sin medida, extendiendo su manto de humanidad a lo largo y ancho de la llanura gangética. Basta sumergirse unos segundos en el bullicio de Chawri Bazar para comprender lo que esto significa. Por eso las autoridades no cejan en sus esfuerzos por organizar y dirigir la creciente marea humana, con obras que parecen ser engullidas al momento por la multitud. Veamos, sin ir más lejos, el caso de Connaught Place –hoy Rajiv Chowk–, en el corazón de la ciudad. En su día fue un centro comercial colonial, de original diseño concéntrico, que fue cayendo en desgracia. Tras la inauguración de un gran cruce de líneas de metro debajo, recuperó su brillo, para ser sepultado al instante por los miles de personas que lo utilizan a diario. Es difícil mantener el brillo de la obra nueva cuando son tantos y tan constantes los que la utilizan constantemente.

Para visitar...

- [El monumental Fuerte Rojo o Lal Qila, la maravillosa fortaleza de granito rojo construida por los emperadores mogoles.](#)
- [El mausoleo de Humayun, uno de los tres sitios Unesco de la ciudad. Con un aspecto que recuerda al Taj Mahal, pero en rojo, dispone de un bello jardín persa estilo charbagh o cuatro esquinas.](#)
- [Hacer un picnic como los locales, en el complejo Qutub. Incluye el Qutub Minar, un minarete de más de 72 metros que fue el edificio más alto del mundo en el siglo XIII.](#)
- [Visitar el Kiran Nadar Museum of Art para obtener una panorámica general del arte moderno y contemporáneo que se realiza en India.](#)

para saber más

webs

Antonio López Gay. Investigador del Centre d'Estudis Demogràfics.



DIVISIÓN DE POBLACIÓN DE LA ONU

www.un.org/en/development/desa/population

La División de Población, que depende del Departamento de Asuntos Económicos y Sociales de la ONU, se ha encargado de realizar desde 1951 las previsiones demográficas que son la referencia para elaborar sus políticas de población y desarrollo. Desde este sitio web se puede acceder a los datos pormenorizados de su última actualización, la realizada en el 2017, a las estimaciones sobre el avance del proceso de urbanización en el mundo, así como a publicaciones sobre fecundidad y planificación familiar, mortalidad, migración, formas familiares y políticas demográficas.



UNFPA

www.unfpa.org

El Fondo de Población de Naciones Unidas destina sus esfuerzos a generar programas de salud pública y desarrollo, sobre todo en países de bajo PIB per cápita. Su propósito es claro y conciso: contribuir a un mundo donde cada embarazo

sea deseado, cada parto sea sin riesgos y cada persona joven alcance su pleno desarrollo. A través de su página web se puede acceder, entre otros contenidos, a su monográfico más popular, *El estado de la población mundial*, que cada año aborda un tema específico en el que se subrayan las fuertes desigualdades actuales en el mundo.



POPULATION REFERENCE BUREAU

www.prb.org

Esta organización, que tiene su sede central en Estados Unidos (Washington DC), está especializada en la recolección y difusión de datos estadísticos sobre población y análisis demográfico. Entre sus productos más populares está el *World Population Data Sheet* que se publica anualmente y proporciona datos actuales de una gran variedad de fenómenos demográficos que abarcan todos los países del mundo. A través de la sección *World Pop Data* se pueden crear gráficos y mapas temáticos de todas las variables existentes y en el *World Population Clock* se visualiza en tiempo real una estimación de la población mundial en continuo crecimiento (en marzo del 2018 marcaba 7.560 millones de personas). La organización también publica en su sitio web informes que ponen el foco en temas de pobreza, desigualdad y programas de desarrollo.



INED

www.ined.fr

En su sección *All about population*, la página web del Instituto Francés de Estudios Demográficos contiene una gran variedad de materiales que abarcan múltiples dimensiones sobre el pasado, presente y futuro de la población mundial. Desde juegos interactivos hasta vídeos didácticos, pasando por la representación gráfica y cartográfica de datos demográficos, estos instrumentos persiguen acercar el debate sobre población a una audiencia menos acostumbrada a tratar estos temas.



GAPMINDER

www.gapminder.org

Esta fundación sueca se popularizó hace una década por sus increíbles gráficos de burbujas móviles a lo largo del tiempo y a las charlas divulgativas del profesor Hans Rosling. Desde entonces, han incorporado numeroso material didáctico y divulgativo a su página web, como *Dollar Street*, que permite observar a través de cientos de fotos cómo son y cómo viven (en múltiples facetas del día a día) las familias de todo el mundo en función de sus ingresos.

otras webs

Perspectivas demográficas

www.ced.uab.cat

Perspectives Demogràfiques es una publicación científica publicada por el Centre d'Estudis Demogràfics pensada para acercar de forma didáctica los aspectos más relevantes de la demografía a un público amplio.

IPUMS-International

www.international.ipums.org

La base de datos desarrollada por el Minnesota Population Center ha revolucionado la investigación en ciencias sociales sirviendo a los investigadores microdatos censales de un centenar de países.

VID

www.oew.ac.at/vid/

El Instituto de Demografía de Viena presenta a través del *Wittgenstein Data Explorer* una proyección de población que incluye el nivel de estudios de la población. La expansión educativa es manifiesta.

Eurostat

www.ec.europa.eu/eurostat

La oficina estadística de la UE proporciona multitud de datos sobre población además de publicaciones sobre los aspectos más relevantes de la dinámica demográfica.

Apuntes de demografía

www.apuntesde-demografia.com

Los principales debates planteados en este blog versan sobre el envejecimiento y las políticas demográficas. Su autor es Julio Pérez, del CSIC.

Exija certificado de autenticidad. TOUS es una marca registrada de S. Tous, S.L.

GWYNETH PALTROW in

Tender Stories N°8

Check it out on Tous.com



TOUS

JOYEROS DESDE 1920



HOW POPULATION CHANGE WILL TRANSFORM OUR WORLD

George W. Leeson

DIRECTOR OF THE OXFORD INSTITUTE OF POPULATION AGEING, UNIVERSITY OF OXFORD.

THE DEMOGRAPHY OF THE 20TH AND 21ST centuries was and is primarily one of ageing, both at an individual and at population level. Population ageing, which was once regarded as an issue for the developed economies of Europe and North America, is truly a global phenomenon now reaching Latin America, the only notable region of exception being sub-Saharan Africa, which remains relatively young in demographic terms.

As individuals, we are living longer and longer. Life expectancies at birth have increased at the global level from 47 years in the mid-20th century to around 71 years today, and are expected to rise to 78 years by the mid-21st century and to 83 years by the end of the century. As populations, we are also ageing, which means that larger proportions of our populations are old. The proportion of the world's population aged 65 years and over has increased from 5 per cent in the mid-20th century to just over 8 per cent in 2015, and by 2050, it is expected to reach almost 16 per

cent, equating to more than 1.5 billion people. The end of the century will see 23 per cent of the world's population, a total of 2.5 billion people, aged 65 years and over.

As families, we are having fewer and fewer children. Fertility rates across all regions of the world have declined from 1950 levels, ranging from 6.6 in Africa to 2.7 in Europe, to 2015 levels, ranging from 4.7 in Africa to 1.6 in Europe. This downward trend is expected to continue everywhere until 2050, except Europe and Northern America, which are expected to experience relatively modest increases in fertility. By 2050, only Africa is expected to maintain fertility levels above replacement level (at 2.9 for the continent as a whole). Such dramatic declines in fertility present huge challenges to individuals, families, and society as a whole, not least because many of these societies are largely family-based in terms of their support system.

So, the world is ageing – both at an individual and at population level – and this demographic development produces both challenges and opportunities for governments, communities, families and individuals across the globe. While increases in longevity and life expectancy relate to our individual ageing, the declines in mortality and fertility relate to age structural change (population ageing), a situation in which the number of older people and their share of the population increases.

For the first half of the 20th century, the populations of the different regions of the world were not that old, with the proportion of population aged 65 years and over ranging

from 3.2 per cent in Africa to 8.2 per cent in North America. Not until 1970 did we see any region with more than 10 per cent of its population aged 65 years and over (Europe at 10.5 per cent). In fact, North America (12.3 per cent) and Europe (14.7 per cent) were the only regions at the end of the 20th century to have more than 10 per cent of their populations aged 65 years and over. By 2015, Oceania (11.9 per cent) had joined the aged regions of the world, but elsewhere proportions aged 65 years and over remained below 10 per cent, with Africa having increased only modestly from 1950 to 2015 to 3.5 per cent of its population aged 65 years and over. The next 35 years or so are predicted to witness dramatic increases in the number and proportion of older people in all regions of the world outside Africa. By 2050, almost 28 per cent of Europe's population is expected to be aged 65 years and over, followed by North America (almost 23 per cent), Latin America and the Caribbean (almost 20 per cent) and Asia (18 per cent). Africa will still have only 6 per cent of its population aged over 65 years.

Fertility – childbearing levels – is one of the drivers of age structural population change and therefore, it comes as no surprise that understanding the dynamics of fertility has generated a large amount of research. It has been argued that the economic development patterns throughout the 20th century led to a century of more or less uninterrupted fertility decline. The argument being that this economic development had increased both the socially constructed costs of children and the opportunity costs of responsible parenthood. These very low fertility levels came with advanced societies experiencing a postponement transition. The classic economic theories of fertility acknowledge the role of the costs of children and even further distinguish between direct costs such as food, clothing and education and indirect (opportunity) costs such as loss of income. As the cost per child increases, the number of children decreases. As disposable income rises with economic growth this increases the opportunity costs of having children, and there seems to be a significant body of evidence underpinning this negative correlation between economic growth and fertility. However, this is now being challenged and revised to suggest a convex impact of economic growth

on fertility levels. There is also evidence of a negative relationship between fertility levels and female labour force participation rates; the experience of the last 50-60 years would seem to lend strong support to this theory. Other factors could of course also impact on the development of fertility, for example, housing, as well as social and cultural factors. The relationships between public policy and childbearing levels are similarly complex and difficult to determine.

From the 1970s to 1990s, the baby-bust fertility levels (1.3 to 1.8) across Northern and Western Europe and North America were unprecedented and were not expected to remain at those levels. However, elsewhere in the world, fertility levels remained high and the world's population was therefore expected to reach 12 billion by the middle of the 21st century. In fact, what happened in the following decades was that fertility levels did remain low, or increased only moderately, in Northern and Western Europe and North America and even declined to much lower levels in Southern Europe. Fertility rates declined dramatically in Asia, coming down by the end of the 20th century to just above replacement level in the region as a whole and to extremely low levels in some countries such as the Republic of Korea (around 1.2), Hong Kong (around 1.0) and Singapore (around 1.3) (United Nations 2017). In the mid-20th century, fertility levels varied from 6.6 in Africa to 2.7 in Europe, and by 2015 this variance was from 4.7 in Africa to 1.6 in Europe. One hundred years later, the highest level of fertility is expected in Africa (2.9) and the lowest in Latin America and the Caribbean (1.76) (United Nations 2017). This is quite a reversal fertility fortune in as much as, while Europe had the lowest level of regional fertility in 1950 and in 2015, by 2050 it is expected that Latin America and the Caribbean will have the lowest regional fertility, having declined from 5.9 in 1950 to just 1.76 in 2050.

It should be pointed out, of course, that within regions there can be quite significant variation between countries. In Latin America and the Caribbean, for example, fertility in 2015 ranged from 3.45 in French Guiana to 1.51 in Santa Lucia. By 2050, these two countries still represent the extremes, but while fertility in French Guiana has declined to 2.5 it has increased to 1.6 in Santa Lucia. By the mid-21st century, fertility levels are expect-

ed to converge towards replacement level throughout the regions outside Africa. Fertility in Africa, while expected to decline, will be around 3. There is, however, recent evidence of fertility stalling in some parts of sub-Saharan Africa (Howse 2015) and this would question the likelihood of levels attaining a low of 3 by 2050.

Mortality is the second driver of age structural population change. Life expectancies have been increasing steadily since the turn of the 20th century, but what has been particularly striking is the improvement in survival at older ages and there is an increasing body of evidence that lives will continue to be extended for some time to come.

The first half of the 20th century saw life expectancies at birth for both males and females in the more developed world increase by around 20 years. In absolute terms, it will take 100 years from 1950 to 2050 to increase these life expectancies at birth by another 20 years. This is driven by a shift in mortality declines from the younger to older age groups, reflecting the demographic reversal of the earlier conviction that mortality at older ages is intractable. Indeed, declines in mortality among the extreme aged have been noteworthy and improvements, albeit more modest have also occurred in the second half of the 20th century. It is interesting to note that, while life expectancy at birth has increased steadily, life expectancy at age 65 was slow in beginning to increase. Indeed, from the mid-19th century to the early 20th century, it remained more or less the same, and the difference between male and female life expectancy at age 65 was small. The turn of the 20th century saw life expectancy at age 65 begin to increase steadily – particularly for females, and with this came a divergence of male and female life expectancies, mirroring the development to some extent for life expectancies at birth. Around the world, new generations can expect to live longer than previous generations, and the rate of increase is surprisingly strong and constant. Life expectancies at birth for both sexes combined have increased at the global level from around 47 years in the mid-20th century to around 70 years today, and are expected to rise to around 77 years by the mid-21st century. In Europe, for example, these life expectancies have increased from 64 years in 1950 to around 76 years today, and

are expected to reach around 82 years by the middle of the 21st century. Most countries of the world experienced significant mortality declines after 1950, which led to marked increases in life expectancies at birth for both males and females, with life expectancies for males rising from between 36 years (Africa) and 66 years (Northern America) in 1950 to between 60 years (Africa) and 78 years (Northern America) in 2015. As for females, increases have been from between 38 years (Africa) and 72 years (Northern America) in 1950 to between 62 years (Africa) and 82 years (Northern America) in 2015.

Female life expectancy continued to exceed male life expectancy in all regions at all points in time from 1950-2015. In 1950, the gender gap was about twice as high (6 years) in the more developed regions of the world (Europe, Northern America and Oceania) than in the developing regions (Africa, Latin America and Asia), a reflection of high levels of mortality across the life course for both males and females in the developing regions. By 2015, the gender gap had widened in absolute terms by 1-3 years in Europe and the developing regions, while it had fallen by 3 years to just 3 years in Northern America.

Many of these improvements are related to a shift from mortality from infectious diseases to mortality from non-communicable diseases. The population forecasts assume continuing declines in mortality in all regions of the world and in addition, the developed – developing country differences are expected to decrease so that by 2050, life expectancies at birth for males will range from 69 years in Africa to 84 years in Northern America, and from 73 years in Africa to 86 years in Northern America for females. In the course of 100 years (1950 – 2050), male life expectancy at birth will have increased by 33 years in Africa and 18 years in Northern America. The corresponding increases for females are 35 years and 14 years.

But we are also entering an era of extremely long lives around the globe. This is destined to be the century of centenarians. Centenarians are nothing new, although verifiable ages at death are increasingly difficult to identify pre-19th century as records were unreliable, if they existed at all. The Greek philosopher Democritus of Abdera is referenced by Diogenes Laertius in 250AD as assuredly having lived 109 years. The longest

lived person in the Bible was Methuselah who lived to be 969 years old (Genesis 5:27), just 7 years longer than Jared who lived 962 years (Genesis 5:20). Indeed, the Bible includes many people living for at least 100 years and even some living several hundred years. This extended and fanciful longevity is probably symbolic of their influence rather than their actual physical length of life.

By the 19th century, with improving and more universal records of births and deaths in many countries, one would assume that evidence of centenarians becomes more readily and reliably available. Many of the claims to such longevity in Europe and North America, however, have been refuted as they cannot be verified beyond doubt. The verified oldest person ever to have lived is Jeanne Calment, who died in France in 1997 aged 122 years and 164 days. The verified oldest person still alive (as of March 9th 2018) is Nabi Tajima of Japan – a youngster at 117 years and 217 days at the time. The highest reported reliable age at death globally is thus well over 100 years, and even 110 years, and has been increasing. There is, thus, considerable evidence that reflects the demographic reversal of the previous conviction that mortality at older ages is intractable. Indeed, declines in mortality among the extreme aged – particularly females – have been noteworthy, and improvements, albeit more modest, have also occurred for males.

Across much of the globe, centenarian populations have increased from “handfuls” to thousands as mid-, late- and extreme late-life mortality have all decreased. The numbers of centenarians for example in England and Wales, Sweden, Japan and France in the 1930s and until the late 1940s were between 40 and 220, but from the early 1950s the numbers in England and Wales and in France began more or less doubling every decade right up until 2012. This decade-doubling did not happen in the United States, however, nor in Sweden except for the 1970s/early 1980s. The case of Japan is interesting because of both the timing and speed of the increase in the number of centenarians – almost doubling from 86 in 1947 to 158 in 1962 and then rising steeply at more than decade-doubling intensity to more than 45,000 in 2012, overtaking and leaving France behind by the late 1990s. Brazil has also seen its centenarian population increase from around 3,000 in 1990 to around 34,000 in

2010, surpassing by then that of India, which had had around four times as many centenarians as Brazil in 1990. The centenarian population in China has also begun to increase, but is still only around one third of those of Brazil and India. In the meantime, centenarians in the whole of Sub-Saharan Africa remain the exception, which is not surprising in a continent where life expectancy at birth is still struggling to pass the 60 year mark.

If ageing is a major demographic issue of the 21st century, urbanisation is the second major issue. The world is becoming increasingly urbanised with more and more people living in urban settings. In 1950, 70 per cent of people globally lived in rural settlements and just 30 per cent in urban settlements. By 2014, 54 per cent of the world’s population lived in urban settings and the urban population of the world is expected to continue to grow, so that by 2050, 66 per cent of the world’s almost 10 billion inhabitants will be urban dwellers. Urbanisation is not uniform across the world. In 2014, the most urbanized regions were North America (82 per cent living in urban areas), Latin America and the Caribbean (80 per cent), and Europe (73 per cent), while Africa and Asia still remained mostly rural, with 40 and 48 per cent of their respective populations living in urban areas. All regions of the world will continue to urbanize with the most rural regions of Africa and Asia urbanizing faster than elsewhere – their urban populations reaching 56 and 64 per cent of their total populations, respectively, by 2050. Although the share of the global population living in rural areas has declined, the absolute size of the global rural community has grown and is expected to peak in the near future. Currently, the global rural community amounts to almost 3.4 billion people. This is expected to decline to 3.2 billion people by the middle of the 21st century. In addition to being the least urbanised continents of the world, Africa and Asia are also home to almost 90 per cent of the world’s total rural dwellers, but as far as individual countries are concerned, India has the largest rural population (857 million), followed by China (635 million).

The global urban community has increased in size almost five-fold from 746 million in 1950 to 3.9 billion in 2014. Asia has modest levels of urbanization as a region, but it is home to 53 per cent of the world’s urban

community. This compares with Europe’s 14 per cent and Latin America and the Caribbean’s 13 per cent. Population growth and urbanisation are predicted to continue into the 21st century, bringing an additional 2.5 billion people to the world’s urban community by 2050, with nearly 90 per cent of this concentrated in Asia and Africa. Strikingly, three countries alone – namely India, China and Nigeria – are together predicted to account for 37 per cent of this projected growth in the world’s urban community between 2014 and 2050, with India adding 404 million urban dwellers, China 292 million and Nigeria 212 million.

Why then is age structural change so important? It is important to adopt a multi-pillared approach to tackle the issues raised by age structural change, ranging from pensions and health and social care to transport and housing, all of which to some degree will apply to all nations of the world as we move deeper into the 21st century. These demographic changes impact and will continue to impact across societies around the world. Growing old in societies dominated demographically by young people is fundamentally different from growing old in societies dominated demographically by older people. There are implications for individuals with respect to planning for old age; for families comprising more and more generations; for communities with increasing numbers of extreme aged people needing care and support; for workplaces short of younger people’s skills. Governments will also need to rethink how public services are planned and delivered across all government departments. These global age structural changes will require a co-ordinated response across government everywhere in order to reflect the inter-connectedness of policies affected by the ageing of populations.

Unless there are significant improvements in health as we move deeper into the 21st century, population ageing will increase the amount of ill-health and disability. Globally, chronic conditions, multi-morbidities, and cognitive impairments will become more common and in societies where the family plays a pivotal supporting and caring role, family members will at the same time face increasing pressure to balance this role with other work responsibilities. There is, therefore, a danger as we move forward that demand and supply of care will diverge, as more and more people

need support (also financial support) while the pool of (younger) workers decreases and families feel the strain.

Population ageing brings with it an ageing workforce. In the more developed economies of the world, productivity and economic development will be increasingly linked to the ability to retain and reskill older workers. Retaining and reskilling older workers for longer will enable societies to support the increasing numbers of older dependents. At the same time, work beyond traditional retirement age will become an increasingly important pillar of financial security in old age. Radical changes to our workplace mentality will be fundamental to the economic wellbeing of societies and populations in the 21st century.

Lifelong learning, training and re-training will become important as populations age as this will allow us to remain active in the workplace and community, which in turn will enhance individual health and wellbeing. Our homes will play a major role in our future lives, and not just as places to live. Our homes will become places of work, play and care, and appropriately designed and adaptable housing will similarly enable us and contribute to our health and well-being as we age.

The question is whether population ageing is a particularly good or a particularly bad development. Causes for concern are linked to the ability of societal infrastructures to accommodate changes in age structures, in this instance the transition from a predominantly young world to a predominantly old world. Clearly, our definitions of old age and older people in a world where we are living longer and relatively healthy lives (for longer) needs revisiting. This applies most certainly to workplace perceptions and practices in respect of so-called older workers.

European populations were surprised by the fundamental changes brought about by the ageing of their populations in the latter part of the 20th century – a combination of demographic resistance to the idea that human longevity could exceed expectations and the decline in mid- and late-life mortality as the prevention and treatment of life style diseases such as cardiovascular diseases improved.

The future will also present surprises and challenges if the evidence of the significantly increasing number of extremely long-lived individuals in our societies is ignored. The 21st

century as the century of centenarians will be challenging in both the developed and the emerging economies of the world. Regardless of location, the trend has fundamental consequences for the way in which individuals view and live these extending lives, but also for the way in which societal infrastructures (education, workplace, housing, transport, health and social care) will need to be adapted to the needs of these extreme aged populations.

How could/should people begin to prepare themselves for such long lives? At the individual level the trend presents a challenge to life course planning. Family dynamics will be challenged by the survival of these extremely long-lived generations delaying inter-generational succession and inheritance and depending on smaller families for support in frail and dependent old age. Given increasing life expectancy and longevity, individuals potentially have the opportunity to contribute to their families, communities, and workplaces for much longer.

And finally, let us not forget that as more and more of us live or aspire to live in urban communities, it is vital that these communities are managed and developed responsibly. Our urban communities are arguably important drivers of development as significant proportions of any nation's economic activity, government, business and trade, and transportation emanate from these communities. Those living in these communities potentially have access to better education, better health, and social services, and they have better and more opportunities for cultural and political participation. But for all these positive aspects of urbanisation, rapid and unplanned urban growth can be a threat to sustainable development. This happens when the necessary infrastructure is not developed or when the benefits of urban living are not distributed equitably across the tens of millions of citizens in these communities. Urban areas then become more unequal communities with millions of the urban poor living in unacceptable conditions.

Population change will indeed change our world as we move deeper into the 21st century. Much of the narrative around ageing and urbanisation is one of success. However, if individuals and societies fail to adapt to the transformations ahead, success may end up turning bitter-sweet.



THE POPULATION EXPLOSION?

Walter Laqueur

CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES IN WASHINGTON.

THE ISSUES AT THE TOP OF THE LIST OF international crises change from time to time, and from country to country. It seldom happens that there is general agreement on one single dominating issue of concern worldwide but this too, has happened. Sometimes it has been the danger of war in the Middle East, at other times a major economic crisis; at the present time, it is the danger of over population in many parts of the globe. The science dealing with this kind of development or danger is called demography, but many doubt whether it deserves to be considered a science given its very limited predictive capacity. The leading international institutions dealing with demography are the World Bank, the United Nations, the European Union and a few others. They have realized long ago that many factors are involved in prediction and therefore they have presented a maximum and a minimum figure, as well as a medium one.

What are the tools used by the demographers? Obviously, they must rely on population censuses. Such censuses, on a small basis, have taken place since time immemorial in villages and cities, in China, India, as well as in many European countries. But could these lo-

cal censuses be trusted? In relatively rich areas, there was a temptation to present low figures so as not to be taxed heavily by the authorities. In contrast, in relatively poor regions the obvious temptation was to increase figures so as to get more help when needed.

The history of demography in England begins with a crisis of this kind, namely a book published by the reverend Thomas Malthus in 1798. His thesis was that population, not only in his country, was increasing quicker than the production of food and other essentials. Malthus did not realize that while the population was indeed increasing fairly rapidly, modern technology could also help remedy the pressures generated from population growth.

Demography as a science goes back much further than the age of Malthus but, in many ways, the issues raised by Malthus still preoccupy those engaged in this field. In France, modern demography started with Alfred Sauvy. It is interesting, but not very surprising, that many of the early demographers were churchmen. The golden age of early demography was between the 14th and 15th centuries. During this age, every new birth was registered in birth registers kept at local churches. Never before had demographers such reliable data at their disposal.

The most recent alert for the dangers of population growth comes from Paul Ehrlich and his uncredited wife, Anne Ehrlich, who wrote *The Population Bomb*. This book, written some forty-seven years ago, claimed that food security in much of the world was in a precarious state and that continued high birth rates would lead to overpopulation, which would then incite mass starvation. Theirs, was a pessimistic book that argued that technology would also be unable to adapt to the growing demand for food worldwide and that countries ought to promote measures of population control to prevent this type of catastrophe. This led to the short formula “Too Many People, Too Little Food” hence the title “*The Population Bomb*” (1971). Developments which took place in the decades following the 1930s seemed to bear out the predictions of the Ehrlichs; when I went to school in the early 1930s the global population was estimated to be roughly two billion, a generation after, the number had doubled. It should be mentioned in this context that what is named a billion in English discourse is “milliaire” in other languages.

Almost from the beginning, there was criticism from inside and outside the discipline. Marxists claimed that the Ehrlichs’ predictions and policy solutions suggested a type of imperial control by the developed world to prevent over population. Other, more rational minds noted the advances occurring in agricultural research that greatly improved the world’s capacity for food production. The Ehrlichs, however, stuck to their basic thesis, even as recently as 2009, despite having admitted that there had been mistakes in as much as certain specific projections had been concerned. Indeed, perhaps their main fault was their deterministic language concerning population growth. Every year, there are almost regular revisions among the various leading institutions engaged in population research.

This is the approach in the difficult field of population forecasts. It is well known that catastrophes have occurred throughout history that have affected this field. Historians report about epidemics ravaging countries and even continents. But with the progress of medicine, this is no longer the case. Comparable ravages caused by wars – and civil wars – have similar effects on populations. But in this case too, the figures have become much smaller. The First World War, to give but one example, was a political disaster for Russia, Germany, and France, yet the number of those killed was no more than about two million in each country. In contrast, the United States’ war in Indochina, a much longer conflict, resulted in around 370,000 dead for it and its allies, and around 900,000 dead for its enemies. These numbers, while still extremely large, do not rival the total number of dead during the Great War.

The rapid increase in global population of the past century exemplifies Malthus’ predicted population pattern. It also appears to describe pseudo-demographic dynamics of complex pre-traditional societies. These findings are the basis for neo-Malthusianism, modern mathematical models of long-term historical dynamics. Malthus wrote that in a period of resource abundance, a population could double in 25 years. However, the margin of abundance could not be sustained as population grew, leading to checks on population growth. If the substance for man that the earth affords was to be increased every 25

years by a quantity equal to what the whole world at present produces, this would allow the power of production of the earth to be absolutely unlimited. This ratio of increase was much greater than what we could conceive as possible, as the exertion of mankind. Yet, due to the power of population being of a superior order, the increase of human species can only be kept commensurate to the increase of the means of substance by the constant operation of the strong law of necessity acting as a check on the greater power.

The preoccupation of demographers, at the present time, focuses on highly feared issues pertaining to political developments concerning the most critical countries most likely to be affected by the very negative effect of overpopulation. On the other hand, the general studies are at present concerned with global projections for 2040 and/or 2050. It goes without saying that population scientists have been shying away from using the term ‘predictions’, for if conclusions for future developments were to be significantly incorrect, they would find themselves subject to great criticism. Hence, the policy of the United Nations demographic section which has tried to replace the old, quasi-scientific term with ‘probabilistic’ estimates. It is however, insufficiently clear how these results are reached. Very obviously, it must be different from the previously termed “middle-estimates”. They do not apparently accept the medium between the highest and the lowest estimates for the future. But in what way they try to do so seems insufficiently clear.

The current projections of world population, is to reach approximately 9.5-10 billion by 2050. The global population will reach about 8.5 billion by 2030 and 10-11.2 billion in 2100. This is according to projections undertaken by the United Nations’ Department of Economic and Social Affairs (DESA). The figures given here are actually revised a little, both downward and upward, to give a wider margin of error, as well as to prevent the appearance of any claim to an exact scientific character. It is also worth mentioning, that DESA undertook this study to prepare a report for a “new development agenda” (whether any such agenda will ever be prepared and whether it should be of any political consequence cannot be taken for granted).

Beyond DESA, there is a general agreement by organizations like the World Bank, the

IMF, and professional demographers across the world, on the likelihood of further growth but at a reduced rate. The growth will be restricted to underdeveloped countries in which fertility will be high. During the period envisioned, growth will be concentrated in the main South and Southeast Asian countries such as India, Pakistan, Bangladesh, and Indonesia. In addition to Asian countries, Nigeria, Ethiopia, Democratic Republic of Congo, Tanzania, and Uganda will also experience increases in growth. In the near term, India is expected to become the largest in terms of population size, overtaking China at around 2022; on the other hand, Nigeria, could overpass the United States by 2050. It should be remembered that as always, the more long-term the prediction, the more likely a mistake is possible.

For example, it was recently discovered that population data during the years of the First and Second World Wars was quite mistaken. Throughout the 19th and 20th centuries, it was perceived that Germany had the most accurate statistics in the world. However, the moment that the German Army was in retreat, figures became uncertain and unreliable. To this day, the number of German soldiers killed between 1944 and 1945 is still unknown. Some still question how many Germans surrendered to the allies and how many were taken prisoner and survived. At the time, all available data were estimates, thus not reliable. These estimates vary, not by a few hundred or thousands, but by 10,000 and on occasion 100,000. This underlines a point alluded to, earlier in this essay. Reliable data can be expected as long as state institutions still function normally. The moment that they do not function, it is the end of a period of certainty. During the 14th, 15th, and 16th centuries, data was more reliable in Germany than in the 1940s. Throughout the middle ages, as mentioned, every birth and almost every death was registered in the church. These records were kept in the church's registry and were preserved up to present day.

Household surveys are crucial to the development of countries all over the world, yet the wealthier countries have more resources to cultivate this type of data. Numbers from these surveys are used to estimate all things related to improving society, including data on mortality, school attendance and income levels. Census data is typically collected by do-

mestic institutions as well as global organizations, such as the World Bank and the United Nations. But this system of collecting data has a shaky foundation.

Africa - The main problem continent

of all of the predicted population disaster areas, Africa ranges on top even though, in absolute figures, growth will be largest in Asia. Such predictions were made years ago by the World Bank, when it was forecasted that the countries in sub-Saharan Africa would make a tremendous leap from a demographic point of view. Particular emphasis was put on countries such as Ethiopia and Nigeria, but the population levels of, other countries further south soon caught up.

At the same time, these countries posed a challenging dilemma. If the right policies and actions are not implemented into Africa's working age population, the consequences will be frightening and far-reaching. The good news is that, with the right policies and actions, countries can accelerate the region's transition to a modern society. This progress includes the movement towards smaller families, healthier and more educated youth, as well as an expanded job market. But, these improvements will only be made if policy makers make the right choices.

In the past 15 years, countries in sub-Saharan Africa experienced impressive and sustained economic growth. Fertility rates and the number of children born to one woman have decreased for educated females living in urban areas. The slow decline in fertility rates in metropolitan areas throughout Africa will likely resume. Despite this decrease, population growth in the region continues to rise.

Estimates show that the region will become a much larger part of the world's population. By 2060, there will be about 10 billion people in the world, with 5.2 billion in Asia, 2.8 billion in Africa, 1.3 billion in the Americas, 0.7 billion in Europe and 0.1 billion in the rest of the globe. These figures are based on projections made several years ago, but more recent forecasts mention even higher figures for Asia and Africa. So far there has been increased attention to the differences between Northern Africa and sub-Saharan Africa. The demographic changes between the regions of East and West Africa are less striking.

The two countries we will concentrate on are Nigeria and Ethiopia. These two countries have differing histories and social structures, nevertheless, they both belong to the same category of the most rapid growing population. For most of its history, Ethiopia was independent from foreign invasion. However, they were invaded by the Italians in 1897 and again by Mussolini in 1935. This second invasion lasted only five years and ended due to the start of the Second World War. Ethiopia has its own church, which is closely connected to the Coptic Orthodox Church of Alexandria, which originated in the 4th century. Since then, the Ethiopian Orthodox Tewahedo Church has sustained its presence in society. Despite this, Islam has made significant progress in Ethiopia as well. Under King Haile Selassie, the position of Muslims was in some respects better than under his successors. Muslims, for instance, were permitted to use their own religious courts for matters impinging on religious issues such as marriage. This was not so after he had been ousted.

Following the end of H. Selassie, the country was besieged by military dictatorships as often and as brutal as those in Nigeria, but its development was more often influenced by Western advisors and influence. Political development in Ethiopia was as abrupt as that of Nigeria. One president was assassinated, another forced into exile, and quasi-democratic interludes were of short duration only. They never altered the instability underlying the political system and, moreover, did nothing to curtail the growing population boom. Any effort at achieving greater stability would have required immense reforms within the country's education system and other types of political improvements. Education too, would have helped the country in terms of family planning. Yet, knowledge in this field, especially, among women remains low.

The prognosis for Ethiopia has been more pessimistic than that of almost all other African countries and the question asked, is why? Fertility has been high, and a figure of a hundred million Ethiopians was widely accepted. One of the reasons, undoubtedly, is the growth of corruption, which while not unknown before, has grown significantly in recent decades. Ethiopia suffers as much, if not more, from waves of famines; it has received billions of dollars in aid from richer countries,

but the use made of this aid is quite inefficient and unsatisfactory. The demographic boom occurred, and since the country is poor in natural resources, this aggravated the situation. Again, as in many other African countries, most census figures could not be implicitly trusted. As for the problems facing Ethiopia, the recent shortage in supply of sugar is a good example of what is in store for its population. The country has been buffeted by violent protests recently, as people protest the influence of sugar's scarcity on Ethiopia's economy. As the number of people increases, naturally, all resources and products become scarce. The Malthusian logic naturally implies that when taking into account the country's population in relation to its productive capacity, the estimated figure of a hundred million people in Ethiopia will shortly be a figure of the past.

Whatever any government plans for the country, the question of how many people is an essential component. The demand for sugar that could not be met on time will soon be one incident among many which the Prime Minister has asked to be excused for. It is strange when all the government can do, with all the economic and political keys at its disposal, is to apologize, showing its inefficiency and inability to manage a country. As one report released recently states¹, the ruling party that has been clinging to power has been effective so far, but tomorrow is another day. Change is coming, and with that what has worked so far in the past will no longer be sufficient. The young generation is more numerous than ever, and the media is not the prerogative of a few people.

Similarly, Nigeria on the other side of the continent is a perfect juxtaposition of wealth and development alongside endemic poverty. The capital city of Lagos has transitioned from a highly impoverished port city, to becoming the largest and most prosperous urban conglomerate on the continent, with a population of 16 million. Much of this boom began in the 1990s after the country transitioned to democracy, and now skyscrapers and wealthy apartments decorate the city's skyline. This wealth though, is not evenly distributed in the country, not to mention the city itself. On the edges of Lagos, there are many urban slums that have yet to receive the benefits of the increasing population growth and the wealth generated by globalization

and international trade. Similarly, in Northern Nigeria, in cities like Maiduguri, poverty and corruption are rampant, which incites discontent. These extremely poor regions of Nigeria are also home to Boko Haram, the deadliest terrorist-cum-insurgent group in Africa. Boko Haram derives much of its strength and operational capability from radicalizing and recruiting the growing number of poor people in Northern Nigeria and exploiting their poverty. The future of Nigeria then, is one where an extremely wealthy developing country must contend with uneven development and inequality to pull many out of slums in its richest city and to undercut the burgeoning insurgency in the north.

Rapid development in Nigeria owes much to the development of oil fields; but it would be wrong to regard oil as the only factor responsible for this rapid development. The role of mining in general has been very often underrated. During the last decade, other factors have played an important role and, in all probability, will have a growing impact on this as far as development is concerned. Also important for Nigeria's economic development has been its unequal character. For the last two decades there has been slow growth and slow decline, again alternating between the two. The unequal character of the economic development of the country has manifested itself by unequal distribution of wealth. A small section of the population has greatly benefited. This has been quite typical for all African economies but was more pronounced in the case of Nigeria because of the size of the country and its economy. Those who grew rich in a relatively short period frequently invested their riches in the United States and other Western countries.

A personal memory: many years ago, on a flight from London to Lagos, we were turned back because fog in Lagos prevented a safe landing. The oasis, as it then was, is located in the south of the country. When we could finally proceed to Lagos, the capital, we faced an unending line of Mamie Wagons, also belonging to a bygone age. A few days of exposure provided an invaluable education of a past period, incredible primitiveness, and all it implied. In all my travels, I have never encountered anything like this. Lagos, anything but metropolitan at the time, has grown to 21 million inhabitants, one of the biggest cities

in the world. The case of Nigeria exemplifies much of African democracy and its potential for encouraging growth and development, despite endemic poverty and violence. Contrast this with more autocratic regimes which have been unable to pull their countries out of poverty despite immense population growth.

Negative Consequences

The negative consequences feared as a result of the population explosion are many. One of the most certain is the changes caused by "Methuselah". If the percentage of elderly and old people (those over 60) break it, their part of the population in the developing countries will be up to 70% within a generation. This is bound to have far reaching consequences with regard to the structure of families. Will employment be found for those of the elderly for whom retirement will come too early? Will there be a sufficient number of younger people capable of carrying the burden of a society with a totally different composition of age groups? With technological progress such a change could be quite possible but how it will work in detail is impossible to fathom.

But this is only one part of the changes to come. Basic changes in lifestyle are another likely consequence and their effects could lead to a decline in fertility. What will happen is that the population cannot be maintained given the quick depletion of non-renewable resources. In brief, changes in lifestyle could reverse over population.

According to the experts, overpopulation can result from an increase in fertility, a decline in mortality, an increase in immigration, a depletion of resources and a number of other causes. Those who stress the importance and urgency of "population moderation" stress issues such as the quality of life, the risk of starvation and a number of other dangers such as the impact on the environment.

Among the effects of over population, the most prominent ecological dangers outlined by the Ehrlich couple in their famous book, were the dangers caused by the reduced habitat of tropical forests due to slash and burn techniques which are sometimes practiced by cultivators, especially in rapidly expanding countries with rural populations. According to the Ehrlichs, this is one of the main causes of what they define as an earth extinction crisis. Among the early victims will be animals

ranging from dolphins in China to Atlantic whales, silver trout and polar bears.

To support large populations, intense factory farming will be needed. Depending on how regulated these practices are, this concentration of livestock can lead to the spread of antibiotic-resistant bacterial diseases, new viruses as well as air and water pollution. There will be an increased chance of the emergence of new epidemics. This already occurred in 2010 with the Swine Flu epidemic and earlier with the fears of Avian Flu spreading. The poor are more likely to be exposed to infectious diseases as they will live in overcrowded conditions and suffer from malnutrition. Generally speaking, the dangers to public health will be enormous. Famines will not occur in rich countries even in conditions of high population densities but elsewhere, poverty and inflation will lead to a low level of capital formation and generally speaking bad government, corruption and bad economic policies.

The overall picture as far as the population explosion is concerned in Central Asia and Bangladesh resembles that of Africa, but only in some countries, not in others. Mention has been made of the fact that the population of India will soon overtake that of China, barring totally unforeseen developments. At the end of the Second World War, the population of Bangladesh was approximately equal to the population of the United Kingdom. Today, Bangladesh has about five or six times as many inhabitants. The situation in that country is particularly aggravated because the population is concentrated in a very small part of the country. In my school days, I was proud of myself because I knew by heart the twenty or twenty-five most populous cities in the world. New York figured first, followed by London, Berlin, and Paris. If there was an Asian city in the top echelon, it was bound to be Tokyo. Today, New York barely figures among the first ten. I doubt whether even our teacher had heard of Dhaka, the capital of Bangladesh. With twenty-one million (concentrated in three mega-slums), it is now one of the biggest urban concentrations in the world. More than any other megacity, the size of its population has widely fluctuated since the days when Bangladesh came into existence.

Bangladesh is a country constantly at risk of natural disasters, especially inundations. This constant fear of flooding causes

mass evacuations. Indeed, the population often falls within days and weeks from six or eight million to a few hundreds of thousands, only to regain its former size within a very short period. The development of the capital reflects, to a large extent, the fluctuation of the population size of the country in general. This has happened in the recent past and is more than likely to happen in the near future, as a result of climate change. In the long-term there could be ways and means to cope with this catastrophe, but not in the short term.

Descriptions about life conditions in this Southeast Asian country, paint a picture of a place in which there is 'standing room' only. Schools are overcrowded, medical services are falling apart, there is much youth unemployment, and those who are lucky enough to find a job, are facing longer and longer commutes – up to six hours.

Looking beyond specific examples of population growth in cities, it is also worth exploring what overuse of resources means for the environment. So far, mention has been made of the danger of all kinds of exotic animals and plants disappearing, but what will be the impact of overpopulation on politics and society? What will be the impact of overpopulation on human beings?

There have been studies and more than a few calculations on what kind of society will be able to survive in these dismal conditions. Obviously, these predictions lie entirely in the realm of speculation, for we cannot possibly know what discoveries, what kind of technological breakthroughs can be expected to affect political life. How much work will be available in the first place? In any eventuality, what sources of food and water will be available to replace those at present available and rapidly being depleted. A recent work entitled *How Democracies Die* argues that such development happens not as a result of great political or economic disasters, but that they die as a result of developments from within these societies, in other words, as a result of declining support for democracy from within. This argument could be true in the case of some regimes and countries, but not in the case of others. It is still true that democracies vanish and collapse in consequence of disasters of various kinds, or to put it in another way, as a result of the diminishing number of those convinced of the desirability of democ-

racy as political organization. The decline of support for democracy in Bangladesh could well belong to this category, to a large extent because of its sizable population and the government's inability to create an infrastructure to support overcrowded cities.

To return to the earlier point of discussion, concerns about demographics into the future remain speculative at best. As this historical and literary review shows, the field of demography remains undeveloped and unable to fulfill its main task of making predictions for how the world's population will affect politics and economics, and vice versa. The number of people who have made millions of dollars predicting demographic catastrophes only to see their predictions not come true are many. Nonetheless, there is value in these exercises for the simple fact that it helps societies anticipate a variety of challenges that may arise, and as such, engage in preparation for these events.

Returning to the protagonists of this essay, it is worth noting that the reverend Thomas Malthus was the seventh of seven children, a fact which might have sharpened his sense for overpopulation. He is buried in a churchyard not far from the ancient and beautiful city of Bath in Southwestern England; Doctor Ehrlich on the other hand is still with us enjoying California. Predictions about overpopulation will no doubt continue, rightly or wrongly, for a long time to come.

1. *All Africa*, November 2017.

THE NEW DEMOGRAPHIC BOMB RISKS DUE TO THE IMBALANCE BETWEEN GROWTH IN POOR COUNTRIES AND AGING IN DEVELOPED COUNTRIES

Jack A. Goldstone

SCHAR SCHOOL OF POLICY AND GOVERNMENT,
GEORGE MASON UNIVERSITY.

Imagine that there is a natural resource that is essential for future economic growth; indeed it is probably THE key resource for

economic growth in the twenty-first century. Now imagine that Western nations and their allies, including Japan and South Korea, are all running out of this resource, with stocks going down and existing supplies getting older and degraded. Looking abroad, there are plentiful supplies of this resource as raw material. But it is low quality, like high-sulfur, heavy oil sands, and so requires substantial investment in order to become usable to fuel economic growth.

A rational policy would be to invest in infrastructure to refine the plentiful stocks of raw material abroad, and then build facilities

Indeed, if too much of the raw material is allowed to build up under certain conditions, it is combustible and risks exploding. The best way to avert this outcome is to refine the raw material into economically useful forms, or remove some of it and export it to other countries. Clearly, this further problem makes the second policy – of blocking imports to Western countries and reducing investment in refining the product in place – even more destructive.

As some readers will have guessed, the resource I am talking about is not oil, nor solar power, nor uranium – even though all of these have some of the characteristics noted above.



ties to import the refined product to fuel new growth. Or, Western nations might choose to import the raw material, and refine it on their own territory for productive use.

A totally irrational and self-destructive policy would be to block imports of the raw material, while not investing in the necessary infrastructure to refine the needed product abroad. This would guarantee that Western economies would lack the key resource they need for growth, making the burden of providing medical care and pensions for their fast-growing elderly populations even more difficult to meet.

Now let us add the problem that this valuable raw material, while essential for future growth, is also unstable in its raw form.

Rather, the resource I am discussing is people, in particular young people aged 15-24.

Young people in this age group are the key workers, innovators, and dynamic consumers of the future. Their productivity will determine the future wealth of nations – in countries where this cohort of young people is larger and more productive than the workers they replace, economies will grow. However, where young workers are no more numerous or productive than the workers they replace, economies will stagnate.

Where are the world's youth?

In the mid-1950s, the developed world held roughly 30% of the world's youth aged 15-24.¹ That number was also growing strong-

ly, from 140 million in 1955 to 180 million by 1980. But from 1980 onwards, the number of young people in the more developed countries started to decline, falling back to 146 million in 2015.

Meanwhile, the number of young people in the less developed regions was exploding. There, the 15-24 age group rose from 323 million in 1950 to just over 1 billion in 2015, a gain of over 700 million, or over 220%.

Most of this increase in the late 20th century occurred in Asia. Yet growth in the size of the youth cohort in Asia has ended. For Asia as a whole, the number of young people aged 15-24 declined by almost ten percent after 2010. This change in direction was led by China, where the “one child” policy combined with rapid urbanization, more education for women, and higher incomes produced a stunning drop in the number of youth aged 15-24: from a peak of 252 million in 1990 to just 182 million in 2015. China is not alone: fertility has plunged across East Asia, and is also falling in many parts of South and Southeast Asia.

All developed nations have shared in this trend. For Europe as a whole (including Russia), the 15-24 youth cohort has declined from its peak of 113 million in 1980 to 82 million in 2015. Japan's youth decline began earlier, with a peak in 1970; and the decline in Japan's youth cohort has been sharper than anywhere else, falling by forty percent between 1970 and 2015.

The United States is a fortunate outlier among Western nations, as its youth cohort is still growing. But the rate of that growth has slowed to a crawl. Where the U.S. youth cohort increased by 82% from 1950 to 1980, in the next thirty years to 2010, the youth cohort increased in size by only 2.6%. That is much better than the 40% decline in youth cohorts suffered by Japan, or the nearly 30% decline in Europe. But even in the U.S., the growth of the youth cohort essentially ended over thirty years ago.

Thus, the countries that have led the global economy in the last fifty years, and which have enjoyed growing youth populations up to the 1980s or 1990s, have all experienced a sharp slow-down or reversal of this growth. From 2015 to 2050, the 15-24 age youth cohort will remain approximately stable in the United States, while declining in all other parts of the world – except for Africa.

In sub-Saharan Africa, despite economic growth, fertility has remained “stuck” at the relatively high level of four to five children per woman. The result is a continuing expansion of the young population on the African continent. By 2050, Africa’s 15-24 aged population will double from the current 230 million to 461 million.

To be sure, Asia still includes some countries with high fertility and growing youth cohorts: Afghanistan, Yemen, Iraq, Palestine, and Pakistan. But almost all the net growth in young people in the world between 2015 and 2050 will occur in Africa. If young people were oil, sub-Saharan Africa would be the Persian Gulf.

The Demographic mismatch: Countries without workers, and workers without jobs

Contemplating a future driven by robots and artificial intelligence, some may think that there is no point worrying about the future labor needs of advanced economies. That may be true for some jobs, such as taxi drivers, production line workers, and cashiers. Yet skilled workers – whether with craft skills in carpentry, masonry, and the like; with advanced technical skills such as writing computer code or welding complex alloys; with human skills such as caring for the elderly, troubled youth, children, and those with disabilities; or with creative skills in the arts, literature, and basic science; and the professions of law, medicine, teaching, and religious ministries – will remain essential to the growth and functioning of economies around the world.

A major driver of job growth will be the need to provide specialized transport, housing, support services, and health care for the elderly. Lifespans have been steadily growing longer, but with longer lifespans comes an accumulation of problems that need health care: fading eyesight and hearing; less mobility and more broken bones; high blood pressure, diabetes, and other ills; worn-out joints and clouded corneas. Many will require nursing home and rehabilitative care. Globally the population over 70 years of age will skyrocket in the coming decades. Their numbers will rise from 395 million worldwide in 2015 to 1.1 billion by 2050.

Where will workers with the diverse skills

needed by advanced economies be found? Skilled workers are produced from a raw material – young people – who are “mined and refined” by being directed into education and training programs that equip them with marketable skills. To be sure, older workers can also be retrained, and indeed lifelong education and training to keep pace with change is now the “new normal.” But if we look to the future, it will not be possible to take those who are 45 years old today and train them to be cutting edge workers when they are 80 years old in 2050. Rather, ALL those who are going to be valuable workers with current skills in 2050 are people who are 25 years or younger today or who will be born in the next fifteen years.

By 2050, only 10% of that valuable resource will naturally arise in Europe and the United States. In the coming decades, stocks will be shrinking in most of Asia and Latin America, but growing rapidly in Africa. If this were any other resource essential for growth, such as natural gas or lithium, companies would be racing to invest in facilities to import it, and to refine it to render it productive. Yet with supplies of labor, the rich nations are doing the exact opposite. They are finding ways to halt immigration, especially from Asia and Africa, and investing minimal amounts in training future workers from those regions.

This is because of widespread hostility to immigration. This is despite the fact that labor from far-away places is the easiest way to fill local needs, especially for jobs in agriculture, tourism, nursing, elderly care, and engineering that local workers are not willing or not trained to do. Most young people in developed countries would rather not have to pick vegetables or solve differential equations. Developed countries, thus, rely on foreign workers to fill these roles. As the size of youth cohorts stagnates or declines in developed countries, more foreign workers will be needed, not less.

Hostility to immigration has both economic and cultural roots. In both cases, anxieties are raised mainly by unskilled foreign workers. While highly-skilled immigrants generally add to, rather than compete with, native workers and bring widespread economic benefits, unskilled foreigners are seen as being directly in competition with, and displacing, native workers. Even more significant are cultural anxieties that unskilled

foreigners will not fit in and adapt to the host society. Rather, it is feared that they will rely on welfare payments, will not learn the local language and culture, will create enclaves living under foreign laws and customs, and commit crimes. These fears lead countries to sharply limit immigration, to create especially high barriers to immigrants from regions seen as more “foreign” or dangerous, and to create strong preferences for skilled as opposed to unskilled migrants.

To be sure, importing unrefined raw material – that is, immigrants without skills – has risks. It is vital that immigrants, like any raw material, get the “refining” they need to become productive. Basic language skills, knowledge of the laws and customs of their host country, and job skills need to be acquired. Today, most Western countries do not have an immigration problem; they have an integration problem – that is, they need to work harder to ensure that existing and future immigrants will be productive contributors to national welfare.

The effort is worthwhile because the gains from having productive immigrants are enormous. Even unskilled immigrants, and more often their children, have surprising talents that benefit their host countries. Almost one-half of the companies in America’s Fortune 500 today were founded by immigrants or their children.² Eight U.S presidents had at least one immigrant parent, including both Barack Obama and Donald J. Trump.

In contrast, consider the plight of Hungary, whose leader Viktor Orban recently said he wants a country where all jobs are filled by Hungarians, from the cleaning lady to the president of the Hungarian National Academy.³ Today, one in six Hungarians is over 65; by 2050 that will rise to more than one in four. At mid-century, the number of Hungarians over 65 will be three times as large as the number of young people aged 15-24. Good luck filling the jobs in a modern, high-tech economy with that population! Orban’s pursuit of ethnic homogeneity will doom Hungary’s population to a future where its economy is unable to compete, and unable to grow.

Even if rich Western countries do not want immigrants from Africa, however, they will have to deal with large numbers of young Africans seeking to cross their borders. The huge growth in youth cohorts in sub-Saharan

African alone will create hundreds of millions of new job-seekers. Especially if they are not trained to acquire valuable skills, they will have difficulty finding jobs in their home countries, and be driven to search for work abroad.

In the rapidly aging societies of Western countries with shrinking youth cohorts, the demand for workers trained in the latest skill set will be huge. But the shortage of such workers locally will crimp growth unless skilled workers can be brought in from abroad or be brought in as youth and trained locally. In African countries with huge youth cohorts, the opposite problem, a shortage of jobs for workers, will lead to great pressures for ambitious workers to migrate. The key problem of the next half-century will be the mismatch between the richer countries that need workers, and the developing countries where workers need jobs. The solution to this problem lies in providing workers with the skills they need to do productive work, and facilitating their orderly movement and integration to places where their skills are needed. Yet at present, the great majority of workers in youth-rich countries are not getting the education and training they need to be productive workers either at home or abroad.

Treating Youth as a Resource: Investment in Education, Training, and Social Order

Western development agencies have invested in education in developing countries. Yet, they have prioritized elementary school enrollment above all else. The result is that the statistics on elementary school enrollment for most African countries and south Asian countries are fine, with large majorities of elementary school age children being enrolled. But the quality of education is often lacking.⁴ Moreover, while elementary education is the foundation for future training and education, it is no longer sufficient by itself to provide marketable skills.

Acquiring those skills requires apprenticeships, vocational education, or secondary and higher education. Yet, this crucial stage of post-elementary education has not been well supported in Africa. In many African countries, total enrollment in secondary school reaches less than half the population – in Uganda, with its population of over 40 million, 72% of all secondary school age students are

not in school. In rural areas of Africa, typically 70% of youth have never attended secondary school. Vocational training is even less attainable – only six percent of total secondary enrollment in Africa is at vocational schools.⁵

The results of this failure to “refine” the skills of young people in Africa are threefold. First, young girls, who even if they finish elementary school can rarely attend secondary school, end their schooling at age 12. This leaves them open for early marriage at age 17 or younger, which promotes high fertility and perpetuates the cycle of fast-rising population, shortages of teachers and school places, and uneducated young women marrying early. Second, a youth cohort with no secondary or vocational education is not equipped to be welcomed and provide needed skilled labor in countries to which they would seek to migrate. This perpetuates anxieties in immigrant-receiving countries about immigrants being low-skilled and hard to assimilate, raising resistance to needed migration. Third, a youth cohort without adequate skill training finds it difficult to obtain rewarding work and to build up higher productivity and the formal sector in their own countries. High youth unemployment and lack of career opportunities leaves young people open to mobilization by militias and extreme ideological movements. As I write this, riots are taking place in northern Morocco, where youth unemployment is 40%; and militias are forming all across the vast Democratic Republic of Congo, portending a resumption of the violence of the 1990s.

If current trends continue, with Western nations working to block migration, and African nations not providing sufficient skills to their youth, the world as a whole will suffer. The rich nations will have grave difficulties in finding sufficiently skilled workers to grow their economies. At the same time, waves of migrants from the huge and fast growing youth cohorts of Africa and Asia will seek to enter Europe and America to find jobs. But their lack of skills will provoke increased resentments and likely heighten the populist ethno-nationalism that has gripped the developed countries, and provided support for more authoritarian and nationalist governments to ward off the immigrant threat. Finally, the surplus of young men without jobs in Africa and South-central Asia will likely produce increased violence and civil conflict

in these regions. This violence will further derail economic progress, and create waves of refugees that will put added pressure on local governments and on migration target countries from those seeking to escape the conflicts.

By contrast, if conditions somehow could be changed to develop an orderly flow of skilled and well-trained migrants from poorer to richer countries, everyone would benefit. Such migration would serve as a safety valve for the vast youth populations in poorer regions, while meeting labor needs in aging, rich ones. A more skilled workforce in developing countries would facilitate development and reduce fertility, breaking the cycle of ever larger youth cohorts. And fears of unexpected waves of unskilled and dangerous immigrants would cease to roil the domestic politics of Western nations.

Is such a change possible? Yes – if governments and private donors treat young people as a valuable resource that needs to be cultivated. The primary focus should be on helping countries with large youth cohorts provide secondary and vocational training. Some of the effort needs to be in providing teachers, including recruiting retired teachers from the West for this new challenge. Some of the effort needs to be in providing physical facilities, including vocational shops and high schools equipped with up-to-date laboratories and textbooks. Some of the effort should be in encouraging more foreign students to enroll in Western vocational schools and universities, especially those training secondary school teachers to return to their home countries to teach.

No doubt this sounds fanciful. But the stakes are nothing less than global peace and prosperity. The successes achieved in the West of educating and employing women and extending life spans have created aging societies with shrinking youth cohorts. The successes achieved in low-income countries of increasing child survival and providing basic diets and health care have produced burgeoning numbers of young people. In both cases, policies achieved their goals and produced success. But those successes have created, and will continue to worsen, a huge imbalance between the richer and poorer regions. The richer regions now face a future without sufficient workers, and the poorer regions a

future without sufficient jobs.

The only way out of this dilemma is through programs to provide valuable skills to young people and facilitate their migration to countries that need skilled workers. We must find a way; otherwise the prospect is for increasing economic strain and the fading of open, inclusive democracies in the West, a sharp slowdown of growth and economic setbacks in East Asia, and fresh waves of violence and refugees in Africa. In other words, the prosperity that had been hard won at the end of the twentieth century could become completely undone in the twenty-first.

1. All data are from the United Nations, *World Population Prospects: The 2017 Revision*. <https://esa.un.org/unpd/wpp/>
2. <https://www.brookings.edu/blog/the-avenue/2017/12/04/almost-half-of-fortune-500-companies-were-founded-by-american-immigrants-or-their-children/>
3. <http://hungarianspectrum.org/2017/03/01/viktor-orbans-ethnically-homogeneous-hungary/>
4. https://www.cgdev.org/doc/full_text/CGDReports/3120290/schooling-is-not-education.html
5. All data in this paragraph from <http://www.aaionline.org/wp-content/uploads/2015/09/AAI-SOE-report-2015-final.pdf>

DEMOGRAPHY AND ECONOMIC GROWTH A POLICY-DEPENDENT RELATIONSHIP

Vincent Barras
& Hans Groth

WORLD DEMOGRAPHIC & AGEING FORUM (WDA FORUM), ST. GALLEN, SWITZERLAND.

DEMOGRAPHIC DYNAMICS, TOGETHER with other megatrends such as globalization, urbanization, industrialization, and the rise of technology, are shaping the future of our societies and economies. Unfortunately, descriptions of megatrends often lack the required granularity to provide actionable insights to policy makers and business planners. This article bridges this gap by highlighting how demographic dynamics influence economic growth. It also puts forward levers for action to

improve countries' demographic fitness and economic competitiveness.

In a first stage, we introduce the field of demography and the fundamental concepts of demographic transition and demographic dividend. Furthermore, we summarize the impact of demography on economic growth to establish the hypothesis that growth-inducing policies are the key drivers of economic development, whereas population size and structure play an enabling secondary role.

We then analyze how population, social, and economic policies can help manage two main challenges posed by demographic dynamics globally. On the one hand, the more developed countries need to find a way of maintaining wealth and welfare and of prospering with a shrinking and ageing workforce. On the other hand, the less developed countries need to build societies that offer employment and opportunities to their youth in order to avoid social unrest. In our conclusion, we explain why and how international cooperation is key to addressing emerging global demographic imbalances. We also highlight that when it comes to managing demographic transitions at a national and transnational level, failure is not an option.

An introduction to demography

Demography, in its narrowest sense, is the statistical study of the changing structure of human populations. Demographic change within a country results from the combined effects of fertility, mortality, and migration flows. The development of these three variables determines a nation's age composition and population size, as typically depicted by population pyramids.

The demographic transition is a long-term phenomenon that follows a gradual shift from high fertility and mortality rates to lower degrees. In a first step, there is an advantageous shift to fewer dependent people relative to working-age individuals, which is statistically measured with the total dependency ratio. During this process, countries can take advantage of the drop in their total dependency ratio, also known as the demographic window of opportunity, to boost their national output with the help of favorable social and economic policies, hence capturing an economic benefit referred to as the demographic dividend. Across the world, North

America, Australia, New Zealand, and Europe have already reached the post-demographic dividend phase. Countries in Latin America and the Asia Pacific are largely acknowledged to be in the early or late demographic dividend phases. Most African countries are still in the pre- or early demographic dividend phases.¹

As the demographic transition continues its course, the dependency ratio begins to increase again, driven by population ageing which is essentially the long-term result of decreasing fertility combined with increasing longevity. This phenomenon is often accompanied by the decreasing size of a given country's population, and in particular of its working age population. This late stage of the demographic transition is in the process of affecting many of the more developed nations, making them the first ones to learn how to manage the consequences of longevity and to set good practices for other nations to follow. On a macro-level, unless people adopt their life plans towards a longer working life, population ageing typically puts a strain on the financial sustainability of public pension systems, healthcare schemes, and social services. This represents a daunting challenge, especially when immigration is not significant enough to offset those effects, such as in the case of Japan in recent years.

When taking a global snapshot with a demographic lens, we see that in 2017, the world counted 7.6 billion human beings (compared to approximately 1.8 billion 100 years earlier in 1917), with 258 million living outside their countries of birth. Women had an average of 2.5 children and 54% of the world population lived in urban areas. In the same year, the global infant mortality rate reached an all-time low of 32 cases per 1000 live births, and life expectancy averaged 72 years, with 70 years in less developed countries and 79 years in the more developed ones. It is worth noting that these statistics diverge rather significantly between more and less developed countries. This applies not only in the case of life expectancy, but for all other metrics as well.²

Some of the most reliable and trusted sources for global statistics are the United Nations Population Division (UNPD), the World Bank, the United States Census Bureau, and the Population Reference Bureau. As most people globally still live in countries that do

not yet have complete and accurate vital registration systems, there remains an inescapable margin of error in current world population estimates. In case of poor data quality, demographic experts will triangulate data sets and combine multiple estimation methods, to increase the accuracy of the published statistics. As part of this process, it is not uncommon for old estimates to be revised based on newly available data. In the case of the forward-looking projections published by the United Nations Population Division, a number of different variants are made available to highlight the effect of assumption changes on the model outcomes. In recent years, probabilistic projection methods have also been used to enhance the models, to better account for the uncertainty of future trends.

Demography and economic growth

Over the last century, researchers have been arguing back and forth on whether demography has any strong effects on economic growth, which is most commonly measured as the growth of GDP per capita. As mentioned in the introduction, no deterministic relationship between demographic variables and economic growth has been found yet that could put an end to this debate. In fact, population growth by itself does not appear to be significantly associated with the pace of economic growth. However, a population's age structure has been shown to have predictive power, and it can be used statistically to explain a significant portion of economic growth. In the absence of a linear relationship, the economic outcomes from demographic change appear to depend on enabling social and economic policies. A favorable age structure is therefore very unlikely to turn into a demographic dividend and to produce favorable economic results on its own.

The relatively weak evidence base regarding the economic effects of demography can be tied back to the fact that as countries develop, their population growth changes endogenously, leaving us with a chicken and egg problem. In this context, tying the lagging effects of fertility changes back to economic growth proves to be rather challenging, especially as changes in policies, institutions and culture need to be accounted for as well. Nonetheless, there is a broad consensus that

policy-induced changes in demographic and economic variables can promote a virtuous cycle of cumulative causation in which economics and demographics interact in a mutually reinforcing way.³

Commonly cited demography-related factors affecting economic growth can be categorized as driven either by population size and structure or by human behavior and decisions. The former category includes the congestion of fixed factors, such as the limited growth pace of arable land and food supply, capital shallowing, which is defined as the decreasing amount of capital per worker, and changes in the ratio of workers to dependents, also known as the dependency effect. The latter category includes changes in the labor supply of working-age adults, changes in the average level of schooling, as well as changes in the saving rates and the introduction of technological or institutional changes.⁴

Population, social, and economic policies

Population policies are defined as the actions taken explicitly or implicitly by public authorities to prevent, delay or address imbalances between demographic changes and social, economic and political goals.⁵ On the one hand, interventions to reduce mortality (e.g. immunization or improved public health) benefit from a broad consensus. On the other hand, interventions affecting fertility (e.g. family planning) and migration (e.g. quotas or screening criteria) are much more polarizing. Many countries do not have an explicit population policy, but often address population dynamics indirectly, whether intentionally or unintentionally, via socioeconomic regulations affecting the drivers of demographic change. For example, policies affecting education, urbanization, or women's empowerment have also been shown to have an impact on a country's fertility rate.

To capture a demographic dividend, public policies must focus not only on population structure and composition, but also on the drivers of social and economic welfare. For these policies to have their desired effects, they need to be embedded in an enabling environment which can count on institutionalized standards in the fields of education, access to healthcare, gender, macroeconomics and good governance.

Sub-Saharan Africa provides a good case analysis, as it encompasses most of the remaining pre-demographic dividend countries and the world's highest fertility rates with an average of five children per woman in 2017 (i.e. twice the global average). The first and perhaps most important obstacle to accelerating the fertility transition in sub-Saharan Africa is the lack of commitment toward a significant fertility decline on the part of African leaders, policymakers, and other important societal stakeholders. Important actions to be undertaken in this regard include extending family planning coverage, further lowering infant and child mortality levels, improving female literacy and education, and increasing the participation of women in the labor force.⁶ The Human Development Index, one of the most widely used indicators of desirable social and economic progress published by the United Nations, consists of three components to measure progress in education, health, and material well-being. Empirical evidence shows that education, especially when made available to women, appears to drive the two other components. This confirms the importance of education from the perspective of both fertility decline and economic development overall.⁷

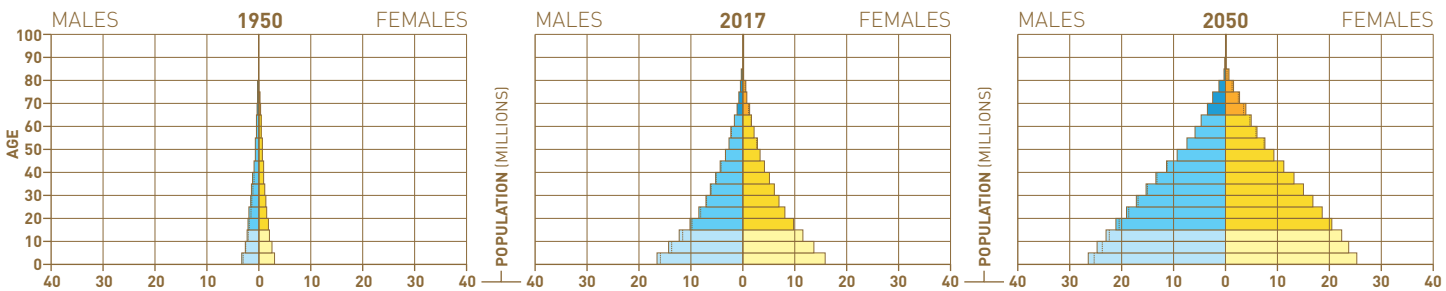
Once the demographic window of opportunity opens, social and economic policies need to be in place in order for a given country to benefit from its demographic dividend. In the case of sub-Saharan Africa, those policies would have to drastically improve the low absorptive capacity of the labor markets, the low level of salaries, especially in the informal sector, and the lack of social protection of the dependents as well as of the working poor. The size of the challenge for sub-Saharan Africa stems from the fact that for many countries, the above-mentioned population, social, and economic policies have not yet been put in place. This leads to a rather pessimistic outlook for these countries.⁸

Nigeria: a pre-dividend country with an open window of demographic opportunity

Nigeria is Africa's most populous nation. It has an estimated population of more than 180 million, which has grown at around 3% annually for the last decades. By 2050, Nigeria will have a projected population of almost

THE POPULATION PYRAMIDS FOR NIGERIA OVER A TIME PERIOD OF 100 YEARS (1950 – 2050)

Are expected to keep their broad-based triangular shape, driven by high birth rates with a current total fertility rate of 5.5 children per woman. The dotted line indicates the excess male or female population in certain age groups. The 2050 numbers are based on the UNPD medium variant scenario.¹⁰



400 million, and it will be the fourth most populous country in the world. With a gross national income of over USD 400 billion in PPP terms, it is the second largest economy in sub-Saharan Africa after South Africa. It is growing economically on a per capita basis at over 3.5% per annum. Despite Nigeria being home to some of the wealthiest families in the region, 60% of the Nigerian population is estimated to be living on one dollar or less a day. Nigeria is ethnically, religiously, and linguistically diverse with some 250 ethnic groups, over 500 languages spoken, and roughly equal numbers of Muslims and Christians, the former living mostly in the Northern areas, the latter concentrated in the South.

With an economy that is still heavily dependent on natural resource rents from the oil industry, cultural and economic marginalization remain key factors in explaining the high rate of population growth. When excluding migration, this growth correlates notably with the incidence and distribution of poverty. Given its beneficial age structure and in order to be able to seize a potential demographic dividend, Nigeria now faces the challenge of embarking on policies that will develop its work force and that will ensure its economic productivity. An additional challenge consists in the fact that policies must be shaped so as to be consistent with the varying realities of Nigeria’s highly diverse regions.

The need for government action becomes increasingly urgent because as fertility declines, the population starts to age, thereby slowly closing the demographic window of opportunity.⁹ Government action is required in particular to create an enabling environment, to expand the income-earning opportunities of its working-age population through sound economic management and investments, and to build the skills of that population, especial-

ly its young workers, so that it can take advantage of those opportunities. An important factor to keep in mind in the case of Nigeria and other African countries aiming to industrialize their economies is the decreasing dependency of the more developed nations on cheaper labor force to manufacture goods for their consumption. While export-oriented manufacturing has been the engine behind the astounding growth of the economies in China, Japan, and South Korea during the 20th century, automation is likely to limit the possibilities available to countries like Nigeria aiming to create extraordinary high numbers of jobs for their growing populations.

The population pyramids for Nigeria over a time period of 100 years (1950 – 2050) are expected to keep their broad-based triangular shape, driven by high birth rates with a current total fertility rate of 5.5 children per woman. The dotted line indicates the excess male or female population in certain age groups. The 2050 numbers are based on the UNPD medium variant scenario .

China: a country having passed the peak of its demographic dividend

With 1.4 billion inhabitants, China is currently the most populous country in the world. Over the last four decades, China reaped the benefits of low dependency ratios combined with decisive and sometimes also controversial economic and social policies. A successful export-oriented growth strategy produced enough jobs to absorb the rapidly growing workforce, a stable macroeconomic environment was attractive to investment, and large-scale, pay-as-you-go pension programs that undermine saving and work incentives were avoided. Since the beginning of its market reforms in 1978, China has lifted

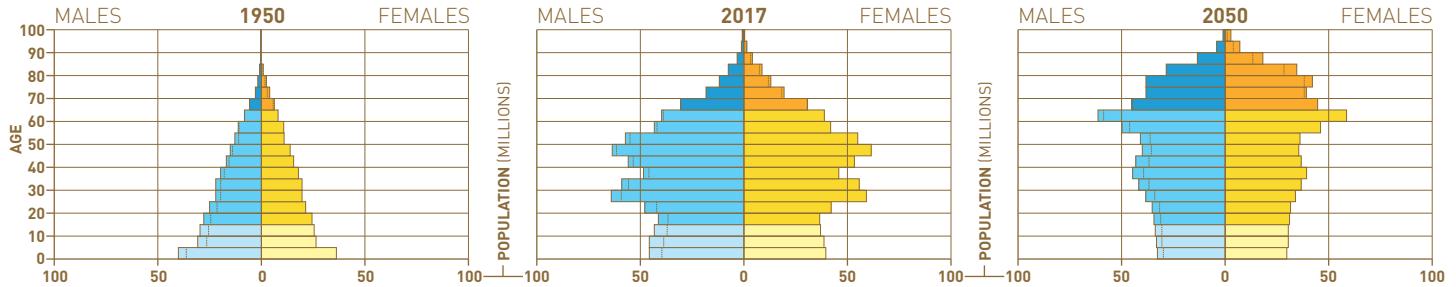
more than 800 million people out of poverty, an achievement of a magnitude never seen before in the history of humankind and which is often referred to as China’s economic miracle.

At the same time, the Chinese population is experiencing a growing elderly segment, which is expected to more than double between 2017 and 2050, increasing from 230 to 480 million people aged 60 and older. Roughly a quarter of this population segment is currently estimated to live under the poverty line.¹¹ The increase in numbers of the elderly will drive a support ratio drop from 4.3 working-age adults per person aged 60 and older in 2015 to 1.5 in 2050.¹² The 4-2-1 problem showcases how after almost four decades of one-child policy, one adult child now supports two parents and four grandparents. Further increasing the level of challenge, studies have suggested that single children – the result of the one child policy – tend to be more self-centered, less optimistic, and less risk taking than children with siblings. If the economic prospects of this one adult child are poor, this leaves the oldest and most vulnerable generation with increased dependency on retirement funds, the state, or charity for support.

The demographic dividend can have a lasting effect on economic growth if the gains in per capita income are used to create human capital by investing in health and education, to accumulate physical capital, to support technological innovation, and to create growth-inducing institutions. Those levers have all been activated by China over the last decades. Since 2008, the country has also extended social security coverage from 250 million people (23 percent of the population aged 15 and over) to 850 million people in 2013 (75 percent of the population aged 15 and over) by combining contributory

POPULATION PYRAMIDS FOR CHINA OVER A 100 YEAR TIME PERIOD (1950-2050)

The population pyramid for China is expected to evolve from its current bee-hive shape to an inverted pyramid shape, driven by rapid population ageing and low birth rates. The dotted line indicates the excess male or female population in certain age groups. 2050 numbers are based on the UNPD medium variant scenario.¹⁴



schemes and non-contributory social pensions.¹³ At this stage, China's pension system is rather thin on the ground and remains chronically underfinanced, making this one of the key focus areas for additional reforms by the Chinese government in coming years.

If China stays on course, the size of its economy could surpass that of the USA within a decade. However, China's growth deceleration after a long period of intensive industrialization and its challenges around demographic sustainability will become increasingly preoccupying as it joins the late-demographic dividend countries.

Population pyramids for China over a 100 year time period (1950-2050): The population pyramid for China is expected to evolve from its current bee-hive shape to an inverted pyramid shape, driven by rapid population ageing and low birth rates. The dotted line indicates the excess male or female population in certain age groups. 2050 numbers are based on the UNPD medium variant scenario .

Switzerland: a post-dividend country and a leader in longevity

Globally, the population aged 60 and older is the fastest growing cohort, with a yearly growth rate of 3%. In 2015, the world counted

962 million people aged 60 or more, which accounted for 13% of the global population. Europe is the region most concerned by this development, with 25% of the population already having reached the age of 60 years and older.

Switzerland, with a population of 8.5 million, a below replacement level fertility rate of 1.55 children per woman, and a world-class life expectancy of almost 84 years, is already heavily impacted by population ageing. In fact, in 2010, already 19.5 percent of working aged adults between 20 and 64 were 55 or older. This percentage is expected to increase by more than four additional percentage points until 2030.¹⁵

On the upside, the ageing population structure can produce a second demographic dividend when older cohorts accumulate capital to finance consumption for their longer lives. If capital accumulation is significant despite the transfer of wealth mechanisms put in place by governments (e.g. via pay-as-you-go pension schemes), this can have a lasting pro-growth effect thanks to investments in infrastructure, technology, and human capital.

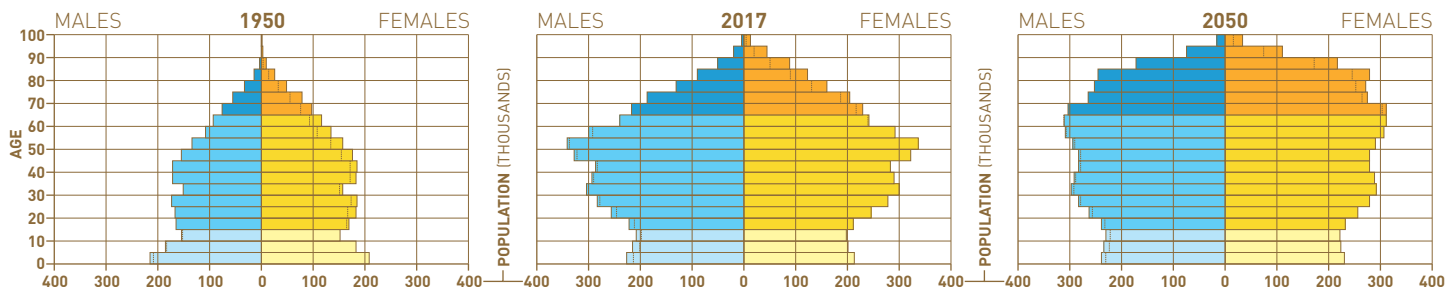
On the downside, the phenomenon of secular stagnation refers to a long-term decline in economic growth, which is not driven

by short term business fluctuations, but by changing fundamental values such as unfavorable demographic dynamics. The challenge in the long run, consists in offsetting the forceful effects of population ageing on the national economic output with the help of female labor force participation, longer work hours, later retirements, human capital investments, infrastructure investments and the adoption of automation technologies. In the case of Switzerland, foreign labor, which constitutes more than 30% of the workforce, also plays an important role in the economy. Overall, thanks to a positive net migration over the last decades, foreigners amount to 25% of the total population, one of the highest percentages in Europe. Foreigners also boost the Swiss fertility rate with an average of 1.91 children per foreign woman living in Switzerland.¹⁶

Looking forward, Switzerland is currently experiencing a slightly decreasing trend in net migration. Human capital development prospects cannot be expected to deliver an economic boost of the same magnitude as witnessed in the 20th century, and the impacts of technological developments on productivity remain uncertain. In view of this, the country will have to focus on two key areas to manage

POPULATION PYRAMIDS FOR SWITZERLAND OVER A 100 YEAR TIME PERIOD (1950-2050)

The country's population pyramids are expected to evolve from its current bee-hive shape to a rectangular shape, driven by a long average life-expectancy. Continuous in-bound migration of young age cohorts partly prevents shrinkage of working age cohorts. The dotted line indicates the excess male or female population in certain age groups. The 2050 numbers are based on the UNPD medium variant scenario.¹⁷



the effects of population ageing and the related increasing number of retirement years. On the one hand, the female labor participation rate, which currently stands at 63%, can be further increased. On the other hand, work life plans will have to shift towards longer professionally active lives with older cohorts continuing to produce income and wealth to finance consumption for their longer lives.

Population pyramids for Switzerland over a 100 year time period (1950-2050). The country's population pyramids are expected to evolve from its current bee-hive shape to a rectangular shape, driven by a long average life-expectancy. Continuous in-bound migration of young age cohorts partly prevents shrinkage of working age cohorts. The dotted line indicates the excess male or female population in certain age groups. The 2050 numbers are based on the UNPD medium variant scenario.

Conclusion

Demographic dynamics can be summarized as a key factor altering the realms of the possible for national welfare and economic growth, thereby having a deep effect on countries' social stability and geopolitical prospects.

Demographic change poses a dual challenge to the world. The more developed countries will have to figure out how to maintain wealth and prosper with a shrinking workforce and increasing dependency ratios due to longevity and low birth rates. The less developed countries will have to create societies that offer employment and opportunities to their youth to avoid social unrest and capture the demographic dividend. Currently, more than 90 percent of poverty is concentrated in pre- and early-demographic dividend countries, while over 85 percent of global economic activity and 78 percent of global growth arises in late- and post-demographic dividend countries marked by population ageing.¹⁸ In both cases, public policies will make a critical difference in how countries manage their demographic change as well as the impact of this change on economic growth. What is important to keep in mind is that a growing population with a favorable structure cannot by itself be expected to lead to economic growth, whereas a shrinking population does not have to halt economic

growth either. Looking forward, freer capital flows, migration, and trade can help respond to growing demographic imbalances globally. Mutual benefits can be realized via capital flows to rising consumer markets, legal immigration to countries with older population structures, and the production of labor-intensive products in younger countries.

To manage these multiple challenges, global dialogue between concerned parties and international cooperation will be key. Failing to address these imbalances could lead to potentially disastrous consequences, both for less developed and more developed countries.

1. World Bank. Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change.
2. United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision; People Reference Bureau. 2017 World Population Data Sheet.
3. Bloom D.E., Canning D., Malaney P.N (1999). Demographic Change and Economic Growth in Asia. Working Paper No. 15. Center for International Development at Harvard University.
4. Ashraf, Q.H., et al. (2013). The Effect of Fertility Reduction on Economic Growth. *Population and Development Review*, vol. 39, no. 1, pp. 97-130. JSTOR.
5. May J.F. (2012). *World Population Policies: Their Origin, Evolution, and Impact*. Springer.
6. May J.F. (2017). The Politics of Family Planning Policies and Programs in Sub-Saharan Africa. *Population and Development Review* (Suppl. to Vol. 43): 308-329.
7. Groth H. May J.F. Turbat V. (2017). Policies Needed to Capture a Demographic Dividend in Sub-Saharan Africa. Conference Paper. IUSSP 2017 International Population Conference.
8. Groth H. May J.F. (2017). Africa's Population: In Search of a Demographic Dividend. Springer.
9. Jimenez E. Pate M.A. (2017). Reaping a Demographic Dividend in Africa's Largest Country: Nigeria. In: Groth H. May J.F. (eds). *Africa's Population: In Search of a Demographic Dividend*. Springer.
10. United Nations, Department of Economic and Social Affairs, Population Division (2017). *World Population Prospects: The 2017 Revision*.
11. United Nations, Department of Economic and Social Affairs, Population Division (2017): *World Population Ageing*.
12. United Nations Population Division, *World Population Prospects: The 2017 Revision*.

13. United Nations, Department of Economic and Social Affairs, Asia-Pacific Human Development Report (2016): *Shaping the Future: How changing demographics can power human development*.

14. United Nations, Department of Economic and Social Affairs, Population Division (2017). *World Population Prospects: The 2017 Revision*.

15. United Nations Department of Economic and Social Affairs, Population Division (2017). *World Population Prospects: The 2017 Revision*.

16. Swiss Confederation, Federal Statistical Office (2017). *Statistical Data on Switzerland 2017*.

17. United Nations, Department of Economic and Social Affairs, Population Division (2017). *World Population Prospects: The 2017 Revision*.

18. World Bank. *Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change*.

LE VIEILLISSEMENT DANS LE MONDE CONSÉQUENCES GÉOPOLITIQUES

Gérard-François Dumont

PROFESSEUR À L'UNIVERSITÉ PARIS-SORBONNE, PRÉSIDENT DE LA REVUE POPULATION & AVENIR.

L'ANALYSE DES CONSÉQUENCES DU vieillissement de la population suppose d'abord de rappeler la nature de ce processus qui se déploie mondialement, mais avec des intensités fort différentes selon les pays. Ce processus se définit comme l'accroissement de la proportion du nombre des personnes âgées dans la population totale. Quelles sont ses deux causes essentielles? La première tient à une faible fécondité, soit ce qu'on appelle un vieillissement « par le bas ». Le deuxième facteur du vieillissement est la baisse des taux de mortalité par âge des personnes âgées, résultant notamment de l'augmentation de leur espérance de vie, soit un vieillissement « par le haut ».

Pour analyser les conséquences politiques du vieillissement de la population, il convient de considérer les deux échelles géographiques de la géopolitique. La première relève de la « géopolitique interne », donc de l'étude des rivalités entre diverses forces politiques à l'intérieur d'un même État. La



seconde recouvre la « géopolitique externe », étudiant les rivalités et les rapports de force entre différents États.

Conséquences géopolitiques internes

En géopolitique interne, le vieillissement de la population s'accompagne toujours d'un vieillissement du corps électoral qui peut être l'un des éléments explicatifs des résultats électoraux et des politiques conduites. En deuxième lieu, tout particulièrement dans sa nature provenant « par le bas », le vieillissement engendre une faible proportion de jeunes avec des conséquences géopolitiques internes possibles. En outre, il peut conduire à stimuler de l'immigration de remplacement susceptible de déclencher des tensions géopolitiques internes.

Vieillissement de la population et choix politiques

Les résultats électoraux sont toujours plurifactoriels. Toutefois, il est impossible de considérer qu'il ne faudrait pas prendre en compte la composition par âge de la population et notamment l'intensité de son vieillissement. En conséquence, la politique de l'État peut se trouver influencée par le vieillissement de la population dans la mesure où la modification de poids électoral des classes d'âge peut conduire à satisfaire davantage celles dont le poids électoral est le plus important.

La répartition des générations au sein

d'une population a donc des effets géopolitiques. Dans les démocraties, les populations âgées exercent souvent davantage leur droit de vote, ce qui entraîne des demandes sociales spécifiques. Ainsi, la frilosité de certains pays à mettre en œuvre des réformes sur la question des retraites s'explique par le poids électoral des classes d'âge les plus concernées. De même, le choix de l'Union européenne, effectué dans les années 1990, d'ordonner aux instances monétaires européennes d'avoir comme priorité des priorités la lutte contre l'inflation, et non la lutte contre le chômage, constitue la conséquence directe du vieillissement des populations européennes. Car, dans un contexte d'inflation, les rentiers ont davantage à perdre que les populations jeunes. La répartition par âge et son évolution est également un élément explicatif des faibles budgets consacrés par les pays de l'Union européenne aux questions de défense - l'Europe n'assurant d'ailleurs pas son indépendance en la matière.

Quelles réactions géopolitiques de jeunes en minorité?

Dans un pays où, sous l'effet du vieillissement de la population, le poids démographique relatif des jeunes est relativement faible, alors qu'à contrario celui des personnes âgées augmente, y a-t-il des risques de discordance entre générations, posant des problèmes de géopolitique interne ?

Supposons que les masses financières des

budgets publics consacrées à la formation initiale, à la recherche, à l'amélioration de la compétitivité du pays, et donc à sa place internationale, diminuent relativement par rapport à celles destinées aux pré-retraités ou aux retraités. Les jeunes pourraient en conclure que leur demande politique n'est guère prise en compte parce qu'ils sont minoritaires. Ce qui pourrait les conduire à des comportements signifiant un refus de la société telle qu'elle s'offre à eux, refus pouvant s'orienter dans deux directions opposées.

La première conduirait les jeunes à une certaine démobilité en raison de leur perte de foi dans l'avenir géopolitique de leur pays - d'où un désintérêt pour le bien commun, que rien ne vient symboliser, ni concrétiser. Les jeunes, se considérant comme une minorité sans voix, pourraient avoir un taux d'abstention électorale élevé, se sentant exclus. Un tel comportement des jeunes appauvrirait la « chose publique », au sens originel du terme. Leur réaction silencieuse se traduirait par une motivation limitée à se former ou à progresser dans des compétences professionnelles, éventuellement par une moindre fécondité qui accentuerait encore le vieillissement de la population, voire préparerait une dépopulation pouvant aller jusqu'à installer un état de langueur démographique dont les effets géopolitiques ne peuvent être neutres.

Mais la seconde expression du refus d'une société vieillissante dans laquelle les jeunes se sentiraient mal intégrés, pourrait se traduire par une réaction inverse. Face à une asymétrie démographique entraînant une asymétrie politique, les jeunes pourraient se rebeller, user de violence pour se faire entendre et manifester leurs attentes, cette attitude pouvant aller jusqu'à des heurts sociaux, des troubles civils, voire une déstabilisation politique du pays. Ce qui précède montre que la part relative des générations jeunes a, dans un pays, une importance politique pour la concorde sociale.

Vieillissement, migrations de remplacement et géopolitique interne

En outre, le vieillissement de la population « par le bas » débouche inévitablement à terme sur une diminution de la population nationale, à l'exemple de l'Allemagne, presque chaque année depuis 1993, ou du

Japon¹ depuis 2015, même si l'augmentation de l'espérance de vie des personnes âgées limite l'intensité de la décroissance démographique. Sans une hausse significative de la fécondité, seul un sol-de migratoire élevé peut empêcher cette décroissance.

En conséquence, le vieillissement de la population « par le bas » finit par engendrer une diminution de la population active, ce qui peut inciter les entreprises à solliciter une ouverture migratoire, légale ou non, afin de faire venir des actifs étrangers puisque ceux ayant la nationalité du pays sont devenus trop peu nombreux en conséquence d'une fécondité très abaissée deux décennies auparavant. Cet appel à des migrations de remplacement s'est par exemple produit dans la France vieillie du XIXe siècle, puis de l'entre-deux-guerres ou en Allemagne depuis les années 1990.

Or, il peut en résulter des tensions politiques internes. Des nationaux du pays peuvent avoir tendance à penser que les immigrants sont des concurrents et poussent à la baisse les salaires et les avantages sociaux. Certains syndicats, comme en France dans les années 1930, le principal syndicat de salariés CGT (Confédération générale du travail), proche du parti communiste, se sont montrés opposés à l'immigration qui n'était pourtant alors qu'une immigration de remplacement. Aux tensions économiques peuvent s'ajouter des tensions culturelles lorsque des nationaux considèrent que les immigrants que le pays a laissés entrer pour satisfaire les besoins de population active ont des caractéristiques culturelles trop différentes de celui du pays d'accueil ou ont des comportements qui ne facilitent pas leur assimilation.

Depuis août 2015, l'Allemagne vient d'illustrer ce phénomène. À cette date, la demande d'asile s'est trouvée stimulée par l'annonce, par la chancelière Madame Merkel, de la suspension de la mise en œuvre des accords de Dublin pour les demandeurs d'asile syriens. Dans le même temps, ses discours favorables à l'accueil des demandeurs d'asile ont été illustrés à plusieurs reprises, et dès le 31 août 2015, de la phrase : *Wir schaffen das* (« Nous y arriverons »).² Or, cette décision, présentée souvent sous son angle exclusivement humanitaire, répondait aussi à un besoin d'immigration de remplacement fortement sollicité par les entreprises allemandes en

manque de main-d'œuvre jeune, compte tenu à la fois du vieillissement et de la baisse de la population active consécutive à plusieurs décennies de faible fécondité. Cela s'est traduit par une arrivée massive de migrants, d'autant qu'un trafic de faux passe-ports syriens s'est déployé. Précisément, le nombre de demandeurs d'asile est passé en Allemagne de 109 375 en 2013 à 172 945 en 2014, 441 800 en 2015 et 722 265 en 2016, soit 1 164 065 pour les deux années 2015-2016 contre 282 320 les deux années précédentes, sans que l'on puisse considérer que la situation géopolitique dans le monde a profondément changé puisqu'en particulier, la guerre sévissait en Syrie depuis 2011.

Or l'intégration de centaines de milliers de personnes, dont l'arrivée s'est particulièrement concentrée sur les derniers mois de 2015 et le premier trimestre de 2016, jusqu'à la fermeture de la route des Balkans et des accords avec la Turquie, s'est révélée difficile. Les Allemands et les Européens ont été particulièrement marqués par certaines violences, comme celles de la nuit de la saint Sylvestre à Cologne où 2 000 immigrants ont commis des agressions sexuelles sur 1 200 femmes. Or, d'une part, la police n'a d'abord donné aucune information comme si aucune violence ne s'était produite ; d'autre part, les faits ont rarement donné lieu à des décisions de justice. Pourtant, « selon les autorités policières, la plupart des suspects sont originaires d'Afrique du Nord et la moitié de ceux qui ont été identifiés était en Allemagne depuis moins d'un an. Pour Holger Münch, le président de la police criminelle, « il y a donc un lien » entre ces agressions et l'arrivée massive de réfugiés dans le pays en 2015 ».³ En outre, l'Allemagne, pays qui est très attaché à un respect rigoureux du droit, a peu apprécié que les pouvoirs publics restent depuis dans l'imprécision, avec plusieurs centaines de milliers d'immigrants, essentiellement ceux déboutés après leur demande d'asile, dont l'administration ne sait ce qu'ils sont devenus.

Ces événements, fondés notamment sur le lien entre le vieillissement de la population et facilitation donnée à des migrations de remplacement, ont donné lieu à des réactions politiques. Ils sont largement explicatifs des résultats aux élections suivantes et notamment fédérales du 24 septembre 2017, avec la montée du parti anti-immigration Alternative für Deutschland (Alternative für

Deutschland) qui est passé de 4,7% des voix en 2013, donc sans élu puisqu'il faut 5% des voix pour avoir des députés au Bundestag, à 12,64% et 94 élus, soit la troisième place des partis politiques allemands.

Le vieillissement de la population exerce non seulement des effets géopolitiques internes, mais également des effets géopolitiques externes.

Conséquences géopolitiques externes

En géopolitique externe, le vieillissement de la population pose la question du poids géopolitique en termes de ressources humaines, tant lors de conflits ouverts qu'en temps de paix, ainsi qu'en termes de moyens pouvant être affectés à la géopolitique. À ces deux aspects, s'ajoute désormais la question des relations internationales avec les pays dont sont originaires les personnes dont la migration originelle s'inscrit dans des logiques conformes aux migrations de remplacement.

Vieillesse de la population et conflits

La mise en évidence des effets du vieillissement sur les ressources humaines du pays et sur l'évolution des rapports de force qui en découle avec les autres pays peut être illustrée par l'exemple des relations entre la France et l'Allemagne dans les premières décennies du XXe siècle.

À la veille de la guerre de 1914, la population de la France présente une répartition par âge vieillie, héritage de plus d'un siècle de fécondité basse, la plus basse d'Europe, d'où un vieillissement « par le bas ». Rapportée à mille habitants, la France ne compte en effet que 339 jeunes de moins de vingt ans⁴ contre 437 en Allemagne et 487 en Russie. Par contre, elle compte 126 personnes de 60 ans ou plus contre 79 en Allemagne et 70 en Russie.

Dans la genèse de la Première Guerre mondiale, ce vieillissement de la population de la France joue certainement un rôle. La jeune Allemagne de 67 millions d'habitants a pu penser qu'elle viendrait aisément à bout d'une France vieillie de 39 millions qui n'a dû son salut qu'à l'apport des troupes coloniales, puis surtout à la spectaculaire montée en puissance de l'armée anglaise, à l'entrée en ligne de l'Italie en 1915 et des États-Unis en 1917.

Toujours au cours de la première moitié du XXe siècle, les conséquences géopolitiques du précoce vieillissement de la population de la France ont été incontestables. Ainsi, une certaine modération dans les relations internationales a été imposée par la situation démographique. Par exemple, dans les années 1920, le ministre français des affaires étrangères, Aristide Briand, répondant aux critiques de ceux qui lui reprochent de promouvoir la Société des Nations et de souhaiter une réconciliation franco-allemande, répond à la chambre des députés : « je fais la politique (étrangère) de notre natalité » ; autrement dit, la France n'est pas en mesure de soutenir une guerre compte tenu de sa langueur démographique. De son côté, Adolf Hitler, en 1924, bien avant d'arriver au pouvoir, dans son projet politique (et raciste) Mein Kampf, sachant le vieillissement de la population de la France, écrit : « La nation française est en train de s'éteindre doucement ». Un constat plaidant, selon Hitler, en faveur d'une Allemagne forte qui peut se permettre d'être belliciste. La situation démographique vieillie de la France est donc une des causes de l'effondrement militaire de la France en 1940 par ses effets directs - crise des effectifs militaires et manque d'ouvriers pour la production économique et d'armements - et plus encore indirects - asthénie économique, état d'esprit frileux, politique extérieure et stratégie timorées.

Différentiels de vieillissement et tensions géopolitiques

Dans les situations de paix, le vieillissement de la population peut faire évoluer les rapports de force géopolitique. Prenons l'exemple de l'Union européenne (UE).

Le traité de Lisbonne organise un nombre de voix au Conseil européen strictement proportionnel à la population des pays, et édicte une majorité qualifiée correspondant à au moins 55 % des États représentant au moins 65 % de la population. Il résulte de cette règle deux enjeux possibles. Le premier tient aux évolutions divergentes de peuplement selon les pays de l'Union, des pays étant en croissance, et d'autres en dépeuplement. Périodiquement, ces évolutions modifient automatiquement en proportion le poids électoral de chaque pays au sein du Conseil européen.

À terme, les différentiels, selon les pays

européens, dans les effets du vieillissement sur le nombre d'habitants sont également susceptibles de remettre en cause la répartition des représentants des pays au Parlement européen, engendrant d'inévitables tensions, puisque la question n'est pas prévue dans les traités européens. En outre, la fin des négociations d'adhésion en cours modifierait profondément les rapports de force au sein des instances de l'UE. En effet, le peuplement de la Turquie, déjà nettement supérieur à celui de la France, va très probablement dépasser celui de l'Allemagne, ce qui en ferait le pays le plus peuplé de l'UE. D'ores et déjà, la pusillanimité de l'UE face à l'agressivité de la Turquie d'Erdoğan s'explique en partie par le poids démographique relatif de la Turquie.

Vieillessement de la population et moyens géopolitiques

Effectivement, dans les rapports de force géopolitiques s'exerce une « loi du nombre » dont ma définition résumée précise que les « décisions et évolutions géopolitiques sont dépendantes du nombre des hommes ». ⁵ Cette loi donne un potentiel géopolitique aux pays les plus peuplés par rapport aux autres. Or, le vieillissement de la population, limitant, voire diminuant le poids démographique d'un pays, est susceptible de réduire ce potentiel, notamment en minorant ses possibilités géopolitiques. En effet, ceteris paribus, la diminution de la population active abaisse les ressources humaines disponibles pour créer des richesses. Sauf à attirer d'importantes vagues migratoires dans le cadre de migrations de remplacement, le PIB d'un pays vieillissant est donc appelé à être contenu même si la productivité par actif ayant un emploi augmente, puisque le PIB n'est jamais que la multiplication de la création moyenne de richesse par actif par le nombre des actifs.

Or les moyens géopolitiques d'un pays dépendent des possibilités de ponctions sur le PIB afin de les financer, même si l'importance de ces ponctions dépend aussi de choix politiques. En conséquence, ceteris paribus, le vieillissement de la population réduit relativement les capacités géopolitiques sous deux effets : la baisse de la population active qui rabote le PIB par rapport à son montant sans cette baisse et le coût du vieillissement de la population. Ce dernier a, en effet, un coût en

termes de revenus et de services à assurer face à la hausse du nombre des personnes âgées. Il comprend les coûts de la dépendance car, même si l'espérance de vie sans incapacité augmente et même si le pourcentage des personnes âgées dépendantes dans le total des personnes âgées diminue, le nombre de personnes âgées dépendantes, quant à lui, est amené à augmenter.

Le vieillissement de la population engendre donc un véritable défi géopolitique notamment parce que le coût de ce que j'appelle la « gérontocroissance » ⁶ ne peut plus être laissé exclusivement à la charge de la famille. En effet, un pays vieillissant « par le bas » ne peut plus demander à des enfants, souvent uniques, de soutenir et leurs parents et leurs grands-parents, d'autant que chaque génération, aujourd'hui, tient à son style de vie.

Plus généralement, il est demandé aux pouvoirs publics d'augmenter les services aux personnes âgées qui représentent une part croissante de la population. En conséquence, des moyens financiers sont nécessaires pour les systèmes d'assurance maladie et de retraite alors même que les effectifs d'actifs susceptibles de les financer ont un poids relatif moindre dans la population, voire sont en diminution.

Ceteris paribus, les budgets publics se trouvant en partie contraints par le vieillissement de la population, les moyens dont ils disposent pour leurs actions géopolitiques, qu'elles relèvent du pouvoir de convaincre (soft power) ou des moyens militaires (hard power), sont moindres.

Migrations de remplacement et sujétions géopolitiques

Les migrations de remplacement, dont nous avons vu précédemment qu'elles peuvent avoir des conséquences en géopolitique interne, en ont également en géopolitique externe. En effet, au XXIe siècle, les immigrants et descendants d'immigrants ne sont plus des personnes contraintes de tourner le dos à leurs régions d'origine, ce qui était le cas au XIXe siècle en l'absence de communications rapides et peu coûteuses.

Le développement du sentiment diasporique est un phénomène croissant. En effet, après avoir émigré de leur pays de naissance, des personnes, ainsi que leurs des-cen-

dants, peuvent conserver la connaissance de leur origine géographique, des liens avec leur terre d'origine, et adopter en conséquence un comportement diasporique, c'est-à-dire nourrir des sentiments de « double territorialité », traduisant un attachement à la fois avec le pays de résidence et celui d'origine. Or, cette double appartenance a des effets géopolitiques car les immigrants de remplacement peuvent déployer des actions géopolitiques.

En conséquence, les pays dont la population comporte des immigrants ou des descendants d'immigrants se trouvent contraints de tenir compte de leur existence dans les relations internationales qu'ils entretiennent avec les pays d'origine de ces personnes. C'est ainsi que l'Allemagne prend des décisions géopolitiques qui ne peuvent ignorer l'importance des immigrants turcs de remplacement qu'elle a fait venir et le fait que, lors des élections concernant la Turquie, ces immigrants expriment un vote plus favorable au parti islamiste de M. Erdogan que les Turcs vivant en Turquie. Au-trement dit, un enchaînement s'exerce entre vieillissement de la population, migrations de remplacement et sujétions géopolitiques.

Ainsi, les conséquences géopolitiques du vieillissement de la population sont nombreuses, même si leur effectivité peut être variable selon les politiques conduites par les pays. Inévitablement, les pays qui connaissent un hiver démographique, c'est-à-dire un vieillissement « par le bas », n'ont pas fini de devoir en assumer les effets géopolitiques.

1. Dumont, Gérard-François, « Japon : le dépeuplement et ses conséquences », *Géocorollaires*, ENS Lyon, 18 octobre 2017.
2. Dumont, Gérard-François, « L'immigration en Europe et en France dans les années 2010 », *Annuaire français des relations internationales (AFRI)*, Centre Thucydide, Université Panthéon-Assas, 2017.
3. « Allemagne : 1 200 femmes auraient été agressées le 31 décembre 2015, certaines par plusieurs hommes », *Le Monde*, 11 juillet 2016.
4. Dupâquier, Jacques (direction), *Histoire de la population française*, Tome 3, Paris, PUF, 1988, p. 506.
5. Dumont, Gérard-François, *Démographie politique. Les lois de la géopolitique des populations*, Paris, Ellipses, 2007.
6. Dumont, Gérard-François et alii, *Les territoires face au vieillissement en France et en Europe*, Paris, Ellipses, 2006.



THE DEMOGRAPHY OF HUMAN DEVELOPMENT, HEALTH AND CLIMATE CHANGE

Erich Striessnig

RESEARCH SCHOLAR WITH IIASA'S WORLD POPULATION (POP) PROGRAM.

THANKS TO THE IMPROVEMENTS IN hygiene and medical treatment possibilities, in particular the invention of antibiotics, world population has been able to grow in an unprecedented fashion since the end of World War II. Starting from 2.5 billion around 1950, nowadays more than 7.5 billion people inhabit the planet. This dramatic increase can also be explained by the historic lag between the decline in death rates and the subsequent decline in birth rates. While parents tend to opt for a higher number of children under high mortality conditions – so as to make sure that at least some of their children will still be around to take care of them should they reach old age – in many societies the news of declining death rates and the implication that fewer children would now “suffice” for that purpose, did not spread fast enough, thus leading to strongly positive population momentum. Whether or not there is a global convergence in demographic regimes and all societies will eventually go through the process

of the demographic transition is still a subject for academic debate. What is clear is that these developments have not caught up with all societies around the world simultaneously and that an increasing time lag leads to wider country differentials in population age structures.

Therefore, even before starting to take climate change into account, contemporary societies around the world are facing a range of different demographic challenges. The age structure of countries where fertility continues to be high to this day are dominated by high proportions of children and adolescents, whose nutrition and education have to be secured before they can hopefully gain access to the labor market in meaningful ways, thereby enabling them to support themselves. Following explosive population growth, which agricultural yields were often unable to keep up with, these countries tend to be heavily dependent on international food imports. The other side of the same coin is the overexploitation of land and natural resources which is likely to cause conflict even under “normal” environmental conditions. Lacking the skills for modern agricultural production techniques, this situation has already led to civil war, famine and the forced displacement of millions in the 20th century. Climate change can be expected to further exacerbate this catastrophic mix.

On the other hand, countries in the later stages of demographic transition are also struggling with the consequences of an

unbalanced population age structure that has long ceased to be represented by a pyramid. Today, they are often urn-shaped and will almost assume the shape of inverted pyramids once the oldest age groups also become the largest. In the long run, these developments will start to decline again, especially when smaller cohorts start entering retirement. But at least in the medium term, the imperative for rapidly aging developing societies will have to be “growing rich before growing old”. Otherwise, aging is expected to pose serious challenges to these nations’ social systems, pension and health insurance schemes, as the growing share of the economically inactive population will be supported by a shrinking working age population. It has been declared that this situation is responsible for a lack of innovation power, economic dynamism, and even gerontocratic conditions, as the average age of the electorate is steadily rising.

Yet, such horror scenarios are not inevitable. Rather, they result from continuously low female labor force participation rates and the supposed immutability of age limits. In those societies where women’s share of the labor market increases and age limits can be flexibly adapted as life expectancy increases, predictions for the future aging crisis look far less pessimistic. Besides that, not everybody above the age of 65 is dependent or in need of care. More and more people are reaching higher and higher ages in good health, maintaining a high standard of living, sometimes even providing care for others. In addition, the elderly of today also tend to be better educated than their cohorts of the past. This advantage in human capital has been shown to help mitigate many of the age-related disadvantages, such that much of the wealth in this world continues to be concentrated in aging societies. In the context of climate change, this increased concentration of wealth is on the one hand, related to the risk of larger financial damages. On the other hand, the increased financial capabilities, paired with larger endowment in human capital, also reduce age-related vulnerability to weather extremes.

Another potential solution to the aging crisis could consist in allowing an influx of young people from abroad. This population exchange between the aging North and the youthful South might in the future, be triggered to a large extent, by the effects of climate

change, which have the potential to displace vast amounts of people in the developing world that is expected to bear the brunt of the consequences of climate change. Yet, it is unclear in which direction attitudes toward migration will shift in future aging societies that will be increasingly dependent on migrants to rejuvenate their workforce. It remains to be seen whether enough political support can be found for the necessary political shifts, which makes migration by far the most uncertain demographic component contributing to population change. Moreover, both aging and migration create potentially vulnerable outgroups, whose vulnerabilities could be aggravated by climate change, as both the elderly and marginalized people living on the fringe of society often do not possess the necessary means to adapt to changing weather conditions such as heat waves or cold spells.

Due to the strong economic disparities between the “Global South” and the “Global North”, which partly result from the asynchronicity in the demographic transition, global migration streams have been increasing in absolute numbers. But this increase is in accordance with the general trends in global population growth. In spite of globalization, migration has not increased since the 1950s in relative terms. Moreover, most migrations are happening regionally, rather than between continents for example. It has to be said, though, that more recent figures including the disruptions triggered by the Arab Spring are not yet available.

Another type of spatial redistribution of populations that gained dramatic momentum over the course of the 20th century was urbanization. While in 1950 only 30 % of the world’s population were urban dwellers, by 2015 this proportion had increased to 54 %. By the year 2050, the United Nations predicts a further increase to 66.5 %. But again, there are vast regional differences: In the already more heavily urbanized developed world, the figure is predicted to be 88 %. This tremendous increase is due both to endogenous growth from within, but also a consequence of mostly young people moving to the cities from rural areas, who are exposed to an increased risk of aging for their part. According to the United Nations, most of the future population growth will be taking place in cities.

As in its historical beginnings, urban-

ization is connected with hopes for better employment opportunities, access to health services, and improved living conditions. However, there is also the fear of increasing impoverishment of marginalized population subgroups. For example, while the fraction of the urban population of sub-Saharan Africa living in slums has slightly decreased since 1990 in accordance with the United Nations Millennium Development Goals, in 2014 it was still at an astonishing 55.2 %, alluding to the necessity of planning future urban development in sustainable ways in order to protect the growing urban populations from the health-threatening consequences of environmental degradation.

So far, the systematic review of the literature on the effects of urbanization on human health still yields a mixed picture. But, it is questionable whether or not this is going to change in times of accelerated global warming. Under ideal circumstances, urbanization can help overcome many of the health problems people in the developing world are facing today, in particular malnutrition. Due to the urban heat island effect, however, cities warm up much more and they also take longer in cooling down again compared to rural settlements. Some analysts suggest that this effect might even reverse or contribute to the slowing down of the urbanization process. In addition, urbanization in the developing world is often characterized by the settlement of so called “climatic hazard zones”. As a consequence, socio-economically disadvantaged groups that cannot afford rising prices in cities, but still want to follow the call of urbanization and its promise of better economic opportunities, find themselves under increased risk from extreme weather events. Thus, in order for the hopes related to urbanization to materialize, it will have to be accompanied by forward looking city planning, as well as an informed health and political agenda.

Urbanization also affects climate change. Due to changing land use patterns and the sealing of soil surfaces in urban areas, urbanization can be expected to contribute to global warming in the future. The extent of the effect does however, depend on urban density and sprawl. Depending on local climate conditions and the availability of public transportation, increased concentration of population can also help reduce emissions through reduced

need for transportation. On the other hand, improved access to energy grids can lead to higher energy consumption. Apart from that, globalization is expected to increase both the frequency and intensity of the global stream of people, goods and services.

While projections of population development undoubtedly depend more heavily on uncertain assumptions, the further one goes into the future, it is clear that the ground for the trends – at least over the next couple of decades – has already been laid by the strong population growth of the 20th century. It is therefore “hard-coded” into the current population age-structure. Despite already shrinking fertility rates – more than half the world’s population now lives in countries with below replacement level fertility of roughly 2.1 children on average per woman – we can expect the world population to continue to grow far into the second half of the 21st century. Besides the continuing increase in life expectancy, particularly in the developing world that is still catching up with progress in health-inducing lifestyles, as well as technological and medical capabilities, the factor that makes demographers most confident in making such claims is population momentum, meaning the inertia of the population system.

Future population growth once again will not spread evenly across the globe. While population is already shrinking in much of Eastern Europe and East Asia, high rates of fertility continue to allow populations grow rapidly in much of the African continent. Moreover, India is about to become the world’s most populous country, while China is slowly heading towards stabilization thanks to its now abandoned one-child policy and concerted efforts in the area of education. With regard to ecological footprint, however, it is less than clear that greater numbers automatically identify greater polluters, as consumption habits, as well as energy sources used are very important in determining environmental impact. Viewed from this angle, the fact that much of the rich, developed world is still not shrinking appears to be an even larger challenge for climate stabilization than the increasing populations in the poorer parts of the world. In this context, the widespread conviction – not only among lay people, but also demographers – that all societies ought to set a fertility rate close to the replacement level so as not to change in

size has to be strongly opposed. If we assume that smaller future birth cohorts will be endowed with more human capital, primarily due to increased investments in education, and therefore with higher productivity than their parents and grandparents, fertility well below replacement level can be shown to be preferable. Due to population decline, lower fertility would at the same time contribute to the abatement of climate change.



AN AFRICAN FUTURE THE PROMISE LIES IN PREPARATION

Elizabeth Donnelly

DEPUTY HEAD OF THE AFRICA PROGRAMME, CHATHAM HOUSE.

LAGOS, NIGERIA'S COMMERCIAL CAPITAL and one of the world's ten largest cities, can be mind-boggling to the newcomer. It combines the extremes of riches and poverty, as its cosmopolitan population blends into a hive of daily activity to survive or succeed. The smells, noise, colour, and heat are at once exhilarating and exhausting. It inspires world-class entrepreneurs and artists. But what's different when compared to major cities in more developed countries is the limited capacity of the city's infrastructure and services to cope with its size and level of activity.

The population of Lagos city might be anywhere between 14 million (UN) and 21 million (Lagos State Government). And the city is so choked by its burgeoning population that

it is the norm for what should be a 10-minute drive to take two hours. Though vastly improved in the last two decades, the city lacks the water, sanitation, transport, energy and drainage infrastructure to accommodate its current population. But based on current projections, some suggest that this city could be host to between 85 million and 100 million residents by 2100.

Urgent action is needed, but steps the state government is taking, whether to redevelop land or improve security, are felt by some – notably the poorest residents – to threaten homes and livelihoods.

Such challenges are not unique to Lagos, but it provides perhaps the clearest example of Africa's coming challenge.

Africa's population will nearly double by 2050, bringing the population up to around 2.5 billion people, or a quarter of the world's population. Nigeria will overtake the United States of America to become the third most populous country in the world, and Ethiopia and the Democratic Republic of the Congo (DRC) will join the ranks of the top ten most populous countries in the world. One look at the true size of the continent and this rapid population growth might not seem to be an issue of concern: Africa's land area is greater than that of the US, China, India, Eastern Europe and France, Germany and Spain put together. About half of the world's fertile and as yet unexploited land is in Africa.

However, while the DRC, for example, has a relatively dispersed population, fertile soil, abundant rainfall and large areas of under-used agricultural land (with the exception of its Eastern border regions), the vast majority of the country's people live with permanent, chronic food insecurity. Zambia meanwhile, a land-locked country in southern Africa and with one of the youngest populations in Africa by median age, will have on average 375,000 young people entering the job market each year according to UN projections – but in a labour market that can currently accommodate less than a third of that figure annually. In the case of Africa's demographic change, the future of its citizens and the nature of Africa's global influence in decades to come, it is not size that matters; it is governance.

African states face the triple challenge of generating economic growth that keeps pace

with population growth, of ensuring that this growth is inclusive, and of creating quality jobs for the growing workforce to continue to sustain economic growth. Prior to the 2014-15 crash in commodity, Africa experienced enviable economic growth – between 2004 and 2011 it achieved an average GDP growth of 6.2 percent. But this growth was not inclusive, and did not produce the transformative results for citizens that it could have, especially for oil producers like Nigeria and Angola.

Looking ahead, the hope is that with such a significant working-age population emerging in the coming years, Africa will experience a demographic dividend – through which transformative growth and poverty reduction will be achieved, which according to World Bank figures could mean 40 to 60 million fewer poor people by 2030. The fear is that the requisite educational attainment, resulting significant increases in skills, and improvements in business environments to enable investment and job creation will not occur – and African citizens could face a future of unemployment, absent services and infrastructure, resource pressures and related consequences such as increasing crime and instability.

A number of countries and contexts will struggle to accommodate their populations. There are significant outstanding development and security challenges across Africa. Only 35% of people in Africa currently have access to electricity and sub-Saharan Africa's road density has declined over the past two decades. Delivery on critical infrastructure is as much, if not more a governance challenge, as it is a financing one. There is seemingly intractable violent conflict in South Sudan and the Central African Republic, political crises in the DRC and Burundi, and violent Islamist insurgencies in Somalia, Mali, and Nigeria. Viewed through the prism of current conflict, humanitarian crises, lack of access to basic services and unemployment levels, providing for Africa's booming young population looks like an insurmountable challenge for some governments.

But African countries have emerged from seemingly insurmountable challenges in the past. The continent has changed significantly in the last three decades. There are fewer civil conflicts and more democracies. Civil society is more active and more effective in

many countries. Mobile phone technology has enabled people to be not only better connected, but to be more financially included – in countries where perhaps less than half of the population have access to a bank account.

African agency and ambition must not be underestimated as a factor in meeting the population growth challenge – especially as it is Africa's youth now that are looking at what might lie ahead for them and have a real stake in policy planning and implementation.

African decision-makers are increasingly thinking about the future. There are two key guiding documents that are defining growth and development engagements in African countries: the African Union's Agenda 2063, which provides a strategic framework for the socio-economic transformation of the continent over the next 50 years, and the 2030 Agenda for Sustainable Development (Sustainable Development Goals or SDGs), which seeks to expand and improve health and education systems, achieve gender equality and women's empowerment, end poverty and reduce inequality.

For African decision-makers, the task of attaining the SDGs while concurrently juggling multiple crises with limited civil-service capacity is daunting – and more so in those countries in which institutions are really weak. Achieving what African states need to in the near future rests on sustained improvements in institutions and policy. Perhaps some of the most important work donors and foreign partners can do in Africa is to help strengthen institutional capacity and efficiency, towards better and more accountable governance.

Countries' prospects are still too easily undermined by corruption and state capture, poor decision-making and lacking social justice: Mozambique, for example, had its donor funding cut and defaulted on its debt last year, after \$2 billion worth of hidden state-backed loans taken out in 2013 and 2014 were discovered in 2016 - \$500 million of which can still not be found. According to World Bank data, Mozambique ranks among countries with the highest levels of poverty. The Mozambique example underscores the importance of improving transparency, government accountability and civic participation. Young people, more exposed to external information flows and influences, are demanding more

of their governments – but without access to and influence in the policy debate are more likely to take their frustrations to the streets, as seen in Mozambique's 2010 food price riots, when most of the demonstrators were young and unemployed people but had wider support.

But while governance, accountability and inclusion are pivotal in improving African states' chances of managing demographic change and bringing about transformative growth, as there has been a move away from liberal internationalism – specifically in the West – and liberal democracy looks increasingly vulnerable in many non-African countries, the emphasis of foreign policy discussions from many quarters is moving away from values and towards interests. Speaking at Chatham House Koen Vervaeke, the Managing Director for Africa in the European External Action Service, said that European Union Engagement in Africa would be moving towards “principled pragmatism”, which seeks to balance interests and values. This is in part, also likely to be a response to the difficulties the EU has had in influencing political reform and pushing on norms: the reality is that in most African states – like in the rest of the world - influencing political decisions and systems is complex and at times impossible, as the failure by regional and international leaders to block the third term of President Nkurunziza in Burundi demonstrated.

In recent years the European agenda on Africa has become increasingly dominated by migration, and domestic concerns are having a clear influence on regional engagement. The growth of anti-immigration sentiment in Europe suggests European populations view Africa with some anxiety. Increasingly, it is perceptions and responses to immigration in Europe that are influencing electoral outcomes: in Germany in September 2017, the anti-immigration Alternative for Germany (AfD) party won almost 13 per cent of the vote. In the UK, immigration was the dominant factor in the vote to leave the European Union. And more recently in Italy, pressures of poverty and unemployment fuelled the populist vote and the rise of anti-establishment parties, with anti-immigration a key campaign platform. But migration in itself is not a causal factor in the rise of populism; rather it is a feature of it, part of populism's dividing lines

between “the people” and threatening outsiders. In fact, if it is inequality and joblessness that have fuelled European populism, then the concerns of European and African citizens are not worlds apart.

Given their history, their physical proximity and socio-economic links, it is undeniable that Africa’s population growth will affect African-European relations – but this is also because of Europe’s shrinking population, which will peak in 2050. Africa will also be much younger, with a median age of 25.4 years in 2050, while in Europe the working age population will have been declining since 2018. The impact of technology and robotics on the labour market is in evidence already – but it is still possible that European labour markets will seek African workers in the coming decades, particularly to support an aging population. But Africa’s population growth will not necessarily mean a proportional increase in migration – much depends on developments in Africa and elsewhere – though the influence of African diasporas will be felt in civic life in the countries in which they settle, as it is now.

Dr Vera Songwe, the Executive Secretary of the United Nations Economic Commission for Africa has said that, “Africa’s demographic dividend could turn into a demographic trap with more countries falling behind and making the SDGs unattainable by 2030. New growth models are urgently needed to help guide public policy.” Technology will surely play a role in these new growth models and ensuring countries don’t fall further behind. The transformative impact of mobile phone technology on communication and financial inclusion needs to be matched in areas of climate change mitigation, power generation and distribution, and education, for example. But the potential of technology and the search for innovative ways of deploying it, also needs to be built into national planning if it is to be transformative for governance outcomes in Africa. Capacity-building in data, technology and e-governance therefore needs to be part of efforts to strengthen accountable institutions.

Sub-Saharan Africa currently accounts for only 1.7% of global trade. If population growth results in a demographic dividend rather than a trap, this may well change: with jobs and wealth there could be a significant

market for imports. But African leaders are also eager to see African manufacturing develop so that their countries can move away from reliance on exports of raw commodities. In March 2018, 44 African leaders signed up to the African Continental Free Trade Area, aiming to create a market of 1.2 billion people, to boost intra-African trade, create regional value chains, and make Africa more competitive globally. This step was taken while the United States is taking a protectionist stance – and is a sign of the recognition in Africa that on some issues a common position or collective action is the best way to improve the prospects of individual nations. African Union member states came together with one voice on climate change in support of the Paris Agreement. African member states together comprise more than a quarter of the United Nations General Assembly – a powerful voting bloc. Africa is changing and in an uncertain, multipolar world, a younger and bigger Africa in terms of population may become more assertive – or at least some of the larger states or those which are better governed. So much depends on getting the right policies in place now and building essential human capacity and civil infrastructure.

The outcomes of Africa’s demographic change will be as diverse as the continent’s 55 countries and their peoples are. For the rest of the world, and Europe specifically, Africa’s growth will certainly mean more engagement with its people – and depending on economic growth outcomes, perhaps deeper commercial engagements. If Africa can find the growth models and implement the policies it needs to avoid future crises linked to population pressures, which is in international interests, then Africa will start to have more visible and direct influence globally. But even now, this is a diverging continent, with some countries and regions far outstripping others in terms of growth, development outcomes and governance. In the near future improvements in governance and support, and perhaps most crucially innovation, for improvements in capacity to deliver are essential: gains are being made but are outstripped by population growth. Lagos will always be mind-boggling – that is the nature of that metropolis – and with more urbanization there will be more cities in similar circumstances, like Kinshasa and

Nairobi. The future livelihoods of citizens in these cities and countries, and whether they will allow for the emergence of Africa’s true potential and the world’s future doctors, engineers and writers, hangs on getting the fundamentals of land rights, infrastructure, health and education provision right now.

LA DÉMOGRAPHIE NOUVEAU DÉFI POUR L’ÉCONOMIE CHINOISE

Isabelle Attané

SENIOR RESEARCHER, DEMOGRAPHER AND SINOLOGIST AT THE FRENCH INSTITUTE FOR DEMOGRAPHIC STUDIES (INED).

LA POPULATION DE LA CHINE A AUGMENTÉ de plus de moitié depuis le lancement des réformes économiques de Deng Xiaoping à la fin des années 1970, passant de quelque 920 millions à 1,4 milliard aujourd’hui. Bien que sa part dans la population mondiale diminue, moins de 19% en 2015, contre 22% en 1975, elle compte encore environ 100 millions d’habitants de plus que l’Inde, 200 millions de plus que l’Afrique et reste donc le pays le plus peuplé du monde. Dans les prochaines années, cependant, les cartes de la démographie mondiale vont être rebattues : en effet, les projections des Nations Unies indiquent que la Chine va être supplantée simultanément par l’Inde et par le continent africain, vraisemblablement avant 2025. Elle pourrait, dès 2030, commencer à perdre des habitants pour tomber à 1,36 milliard au milieu du siècle soit 14% de la population mondiale ou encore 300 millions de moins que l’Inde à la même date (1,66 milliard) et un milliard de moins que l’Afrique qui devrait dépasser les 2,5 milliards d’habitants en 2050.

Les transformations de la structure par âge qui vont de pair avec ce recul démographique représentent des défis majeurs tant pour la société que pour l’économie. En effet, démographie et performances économiques sont étroitement liées, puisque les comportements des individus : productivité au travail, épargne, structure des dépenses, etc varient fortement selon leur âge. Cela vaut autant au



niveau des ménages qu'à celui de la société dans son ensemble. Autrement dit, lorsque la baisse du nombre d'enfants s'accompagne d'une augmentation modeste de la population âgée, et donc que la part de population en âge de travailler est importante, le rapport de dépendance (qui mesure le nombre de personnes économiquement dépendantes : enfants et personnes âgées par personne d'âge actif) diminue ; c'est le « dividende démographique ». Les adultes d'âge actif ont alors à supporter un fardeau social relativement bas. Étant plus nombreux, ils peuvent réduire leurs dépenses en faveur des enfants et consacrer une part accrue de leurs revenus à l'épargne et aux investissements productifs. Ce faisant, outre la main-d'œuvre abondante qu'ils mettent à disposition de l'économie, ils contribuent à en stimuler la croissance ; cet effet est d'autant plus bénéfique que leur taux d'emploi est élevé. La Chine est entrée dans cette phase à la fin des années 1970, lorsque les générations nombreuses nées au début des années 1960 ont commencé à arriver sur le marché du travail alors même que la baisse de la fécondité se confirmait. Dès lors, la part de personnes en âge de travailler (15-59 ans) a fortement augmenté, pour atteindre un niveau exceptionnellement élevé : 70% en 2010, contre 53% en 1970. Or, cette période a également connu une forte croissance économique de 10% par an en moyenne, permise par la réforme du système de production et la hausse de productivité qu'elle a engendrée. La baisse du rapport de dépendance favorisée

par le contexte démographique entre 1982 et 2000, aurait contribué à environ un quart de la croissance du PIB par habitant. Or, le « dividende démographique » est transitoire : lorsque la population vieillit, le rapport de dépendance recommence à augmenter et alourdit le fardeau social des actifs représentés, cette fois, non plus principalement par les enfants mais par les personnes âgées.

La Chine se trouve aujourd'hui à ce moment charnière : quarante ans après les premières réformes qui l'ont, en peu d'années, hissées au rang de 2^e puissance économique mondiale, son économie s'essouffle. Cette nouvelle conjoncture coïncide avec la fin de son « dividende démographique » : en 2010, elle battait un record mondial absolu avec 945 millions de personnes en âge de travailler (soit presque 30% de plus qu'en Europe et en Amérique du Nord réunies à la même date). Mais ce chiffre devrait chuter de plus d'un quart d'ici 2050 pour tomber sous la barre des 700 millions. Ainsi, alors que l'économie chinoise a pu, entre les années 1970 et 2010, tirer pleinement profit de ce réservoir de main-d'œuvre exceptionnellement abondant, cet avantage va rapidement s'estomper : au milieu du siècle, seul un Chinois sur deux sera d'âge actif. L'autre fait marquant est l'accélération du vieillissement : entre 1970 et 2015, la part des 60 ans ou plus a plus que doublé passant de 6% à 15% mais au milieu du siècle, la Chine pourrait compter près de 480 millions de personnes âgées, soit plus d'un tiers de sa population (35%). Avec un âge

médian de 48 ans en 2050, elle figurera parmi les pays les plus avancés dans le processus de vieillissement, plus très loin derrière des pays d'Europe comme l'Allemagne (50,3 ans en 2050) et l'Espagne (52,3 ans) et, en Asie, la Corée du Sud (53,9 ans) et le Japon (53,2 ans) – contre seulement 43 ans en France. De nombreux pays sont confrontés au vieillissement de leur population. Mais dans aucun d'entre eux, à l'exception notable du Japon et de la Corée du Sud, il n'a été ou ne sera aussi concentré dans le temps qu'en Chine : la part des 60 ans ou plus y doublera pour passer de 15% à 30% environ en 25 ans (2015-2040), soit aussi vite qu'au Japon (1985-2010) – une transition que la Corée du Sud effectuera en seulement 20 ans (2010-2030). Par comparaison, il faudra 45 ans à l'Espagne (1980-2025), 70 ans à l'Allemagne (1950-2020) et 90 ans à la France (1945-2035) pour effectuer cette transition.

Partout dans le monde, dès lors que le vieillissement s'accélère, se pose la question de la prise en charge des personnes âgées, notamment en termes de santé, de bien-être et d'autonomie financière. Or, l'État chinois reste dans l'ensemble largement absent dans ce domaine. Le système de retraite par répartition qui avait été instauré par Mao Zedong dans les années 1950 ne bénéficie qu'à une fraction des retraités (ceux des entreprises d'État et de l'administration) et n'est que partiellement relayé par le nouveau système mis en place, censé bénéficier à l'ensemble de la population à l'horizon 2020. En 2010, une pension de retraite ne représentait en effet la principale source de subsistance que pour un retraité sur cinq (19,6%) ; un autre cinquième (21,9%) continuait à vivre principalement du revenu de son travail, tandis que la moitié d'entre eux (52,6%) subsistaient principalement grâce à un membre de leur famille, à savoir un conjoint ou, souvent, un enfant. La généralisation du système de retraite est pourtant d'autant plus nécessaire que les solidarités intergénérationnelles, forme traditionnelle de prise en charge des personnes âgées, sont compromises par le vieillissement démographique, le nombre de personnes âgées augmentant rapidement tandis que celui des adultes d'âge actif est en diminution. De plus, la libéralisation du marché du travail pousse désormais une majorité des jeunes adultes à quitter leur région d'origine pour travailler ailleurs dans le pays, s'éloignant

ainsi de leurs parents et limitant de fait les possibilités d'entraide au quotidien.

Le vieillissement et la fin du dividende démographique constituent deux défis majeurs pour l'État chinois : d'une part, parce qu'il devra procurer des conditions de vie décentes à la population âgée ; d'autre part, parce que la moindre disponibilité en main-d'œuvre, en particulier celle issue de la migration interne, jeune et peu qualifiée sur laquelle la croissance économique chinoise s'est jusqu'ici appuyée, tout comme la hausse des salaires induite par cette baisse obligent la Chine à repenser son modèle économique (selon des économistes chinois, les travailleurs issus de la migration interne auraient, entre 1978 et 1998, généré plus de 20 % de la croissance du PIB). Une particularité tient en outre au contexte inédit dans lequel émergent ces défis. Le développement économique et la transition démographique en Chine sont en effet allés de pair avec divers problèmes : inégalités socio-économiques, problèmes environnementaux et autres à l'origine d'une fracture sociale importante. La Chine est ainsi devenue l'un des pays les plus inégalitaires au monde : 1% de la population détient un tiers de la richesse nationale, tandis que le quart des ménages les plus pauvres n'en détient qu'à peine 1%. Les inégalités de revenus y sont désormais parmi les plus marquées de la planète : de 0,27 au milieu des années 1980, le coefficient de Gini est passé à 0,47 en 2012 – le seuil de 0,4 étant considéré comme alarmant par la Banque mondiale. Officiellement,¹ les inégalités de revenus y sont donc désormais plus marquées qu'en Inde (0,34) et au Bangladesh (0,32) et presque autant qu'au Brésil (0,52). De plus, contrairement aux pays les plus avancés dans le processus de vieillissement, comme le Japon, la Corée du Sud ou l'Allemagne, la Chine n'est pas un pays riche : bien qu'au 2e rang mondial pour son produit intérieur brut en valeur absolue, en 2016, elle ne se situait qu'au 77e rang en termes de PIB par habitant (en ppa), certes devant l'Inde (120e), mais distancée par d'autres pays émergents comme la Fédération de Russie (53e) ou la Corée du Sud (33e) ; le niveau de vie moyen y reste relativement bas et, malgré une croissance forte ces trente dernières années, son économie reste largement sous-développée. La Chine ne dispose pas non plus des atouts dont les économies développées ont su se

doter pour faire face au vieillissement. Alors que ces dernières ont une économie axée sur les services qui génèrent entre les deux tiers et les trois quarts du PIB au Japon et en Allemagne, par exemple ; ce secteur est peu développé en Chine : 46% du PIB en 2013, où il n'occupe que 36% de la population active contre plus de 70% au Japon et en Allemagne. Enfin, la consommation des ménages reste faible contribuant à environ un tiers du PIB chinois, contre 60% à 70% dans la plupart des économies de l'OCDE. Et la dépendance de son économie aux exportations reste importante soit un quart du PIB chinois.

Pour tenter, selon la terminologie officielle, de « corriger les déséquilibres », le gouvernement chinois donne désormais la priorité à « l'harmonie » – concept fondamental de la philosophie confucianiste. Dans sa version socialiste diffusée à partir de 2006, l'objectif de « société harmonieuse », censé être atteint en 2020, vise à remédier aux effets pervers d'un développement économique effréné, sourd aux attentes de la société civile et au bien-être de la population. Cela se fait notamment en réduisant les inégalités entre villes et campagnes, en favorisant une répartition plus égalitaire des revenus, en abaissant le chômage, en mettant en place un système de sécurité sociale universel, et en favorisant un développement durable. Les autorités chinoises souhaitent ainsi trouver de nouveaux ressorts à l'économie afin que le pays, aujourd'hui classé parmi ceux à revenu intermédiaire, se hisse lors 13e plan quinquennal (2016-2020), au rang des pays à hauts revenus. Elles cherchent aussi à éviter le « piège du revenu intermédiaire » : l'explosion des coûts du travail a réduit la compétitivité de son secteur industriel. Dans le secteur manufacturier, les salaires ont augmenté de plus de 70% entre 2008 et 2013 ; la Chine ne peut donc plus rivaliser avec des pays à plus bas salaires comme le Vietnam ou le Cambodge et sa faible capacité d'innovation technologique l'empêche encore de rivaliser avec les économies développées. Les nouvelles réformes visent, conformément aux préconisations de la Banque mondiale (2012), à stimuler la consommation intérieure et tenter ainsi de sevrer la croissance économique de sa dépendance aux exportations, de même que de mettre l'accent sur l'innovation technologique et la production de services, notamment pour répondre aux

besoins des populations âgées. Il s'agit aussi de permettre à ces dernières d'accéder à une autonomie économique, de sorte qu'elles soient en mesure d'abord, de s'extraire de la logique de simple subsistance dans laquelle la majorité d'entre elles se trouve, puis d'être parties prenantes de l'économie en devenant des consommateurs à part entière – pour, in fine, contribuer à stimuler la consommation intérieure.

Les réponses de l'État chinois au vieillissement de sa population n'ont pas été apportées dans la période du « dividende démographique ». Elles devront donc l'être dans un contexte moins propice, caractérisé à la fois par un ralentissement de la croissance économique lié à une perte de compétitivité et par un endettement public accru, découlant notamment de la hausse des dépenses sociales associées au vieillissement. Tout en relevant ces défis propres aux pays les plus développés, l'État chinois devra résoudre d'autres problématiques plus spécifiques aux sociétés en développement : urbanisation rapide, lutte contre la pauvreté, dégradation de l'environnement, etc.

1. Selon une estimation indépendante du Shanghai Advanced Institute of Finance, le coefficient de Gini en Chine serait en réalité beaucoup plus élevé, atteignant 0,61.

INDIA, THE MOST POPULATED COUNTRY BY THE END OF THE CENTURY CHALLENGES OF DEMOGRAPHIC CHANGE

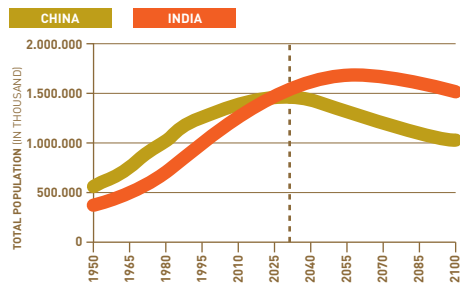
Samik Chowdhury

ASSOCIATE PROFESSOR INSTITUTE OF ECONOMIC GROWTH. DELHI, INDIA.

INDIA, COMPRISES A MEAGRE 2.4 PER CENT of the world surface area, but is home to a whopping 17.7 per cent of the world population. With 1.3 billion inhabitants, the population of India is equal to the combined populations of the U.S.A, Indonesia, Brazil, Pakistan, Bangladesh and Japan. This

means that one in every six inhabitants of this world is Indian. According to the 2017 Revision of World Population Prospects, India will surpass China to become the world's most populous country in 2025. While China's population will start declining after 2025, India will continue to grow till 2061 when its population will peak at 1.7 billion, declining thereafter (See Fig. 1(a)).

FIG. 1a
POPULATION TRAJECTORIES - INDIA AND CHINA

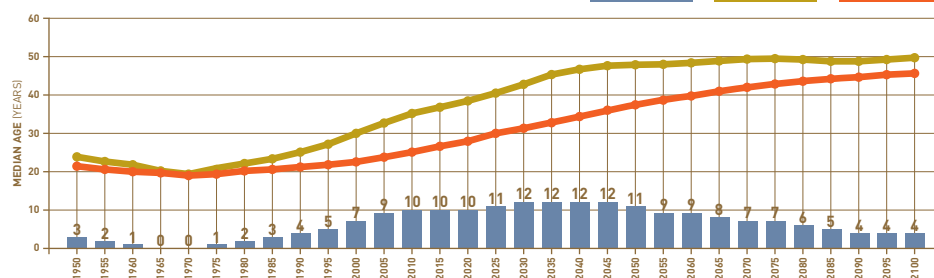


SOURCE: World Population Prospects, 2017.

A significant demographic achievement for India has been the reduction in fertility rates i.e., the average number of children a woman expects to have in her life time. The fertility rate of Indians has more than halved from an overwhelming 4.97 during 1975-1980 to 2.3 for 2015-2020. By 2025-30, the fertility rate is expected to go down to 2.1, the level at which the population replaces itself. The two direct positive consequences of this commendable decline in fertility are (1) low median age and (2) low dependency ratio.

India currently has a median age of 27 years, which means more than half of all Indians are in their twenties. The corresponding number for China is 37, a difference of 10 years which is likely to increase till 2040, declining thereafter (See Fig. 1(b)).

FIG. 1b
MEDIAN AGE - INDIA AND CHINA

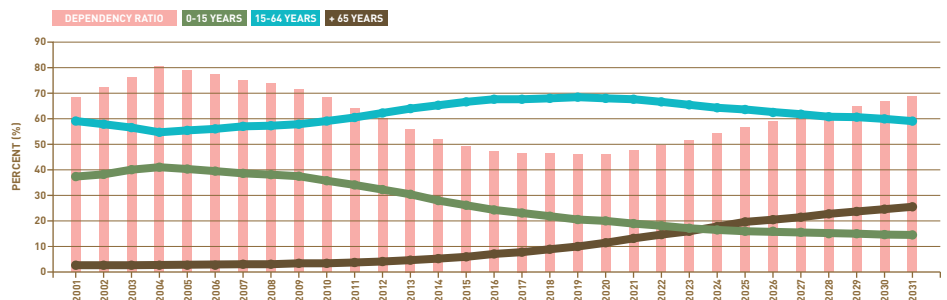


SOURCE: World Population Prospects, 2017.

The proportion of economically active (15-64) population in India stands at 66%. Conventionally, very few people outside this

age group work. Thus, the remainder, that is, close to 450 million people, can be considered as the “dependent population”. The “dependency ratio” defined as the ratio (expressed here as a percentage) of the dependent population to the economically active population, currently is around 50 per cent. The prediction is that the decline in India's dependency ratio, which started in the mid-sixties, will continue till 2040 (See Fig 2).

FIG. 2
SOME KEY CHARACTERISTICS OF INDIA'S POPULATION - ACTUAL AND PROJECTED



SOURCE: World Population Prospects, 2017.

These demographic processes, especially the population bulge in the working age groups are likely to create a large and growing labour force that could potentially contribute to growth and prosperity through several channels. At a micro level, this should translate into a rise in the relative number of income earners. Also, with fewer children, female labour force participation rates should increase; so this gives a further boost to the “bread-winner” ratio. A more indirect but significant benefit for the economy is the effect this can have on gross savings, capital formation and eventually, economic growth. Another potential advantage of a large young population is a huge market that could provide the perfect investment incentive for the global footloose capital of today, which

depend” which is opposed to the orthodox notion of population being a source of economic problems.

An enormous growing population with a low median age can be an engine of development for a nation. However, neglecting the challenges caused by such a situation could be disastrous in the long run. In the case of India, while the demographic dividend has yet to be reaped, it is already facing some of

the challenges of a large population.

Table 1 shows India's performance on some key indicators vis-à-vis China, its equally populous neighbour and perceived competitor.

One can see that India lags behind in almost all indicators. Even in an absolute sense, the situation is alarming in many of these basic indicators e.g., more than half of all pregnant women in India are anemic and public spending on health is just 1 per cent of India's GDP. Clearly, there are multiple challenges and these are only going to intensify as India surpasses China to become the world's most populous country.

Changing Age-Structure

While the current “demographic dividend” is a distinct advantage, the share of population over the age of 65 is projected to increase from 6 per cent in 2015 to 13 per cent in 2050 (see Figure 2). By the end of the century, the elderly will constitute more than a quarter of the total population in the country. As the population greys, India's dependency ratio will rise, and that will become evident by 2045 or so. So, if India wants to use its global competitive advantage of having a large working age population, it has around 20 years to do so because the share of working age (15-65) population will start declining after 2040 (Fig 2). A large proportion of el-

TABLE 1
PERFORMANCE ON BASIC INDICATORS – INDIA & CHINA

INDICATORS	INDIA	CHINA
GNI PER CAPITA, ATLAS METHOD (CURRENT US\$)	1.600	7.950
URBAN POPULATION (% OF TOTAL)	33	56
LABOR FORCE, FEMALE (% OF TOTAL LABOR FORCE)	25	44
LIFE EXPECTANCY AT BIRTH, TOTAL (YEARS)	68	76
IMPROVED SANITATION FACILITIES (% OF POPULATION WITH ACCESS)	40	77
HEALTH EXPENDITURE, PUBLIC (% OF GDP)	1	3
HEALTH EXPENDITURE, PRIVATE (% OF TOTAL HEALTH EXPENDITURE)	70	44
MORTALITY RATE, INFANT (PER 1,000 LIVE BIRTHS)	35	9
SCHOOL ENROLLMENT, TERTIARY, FEMALE (% GROSS)	25	43
CAUSE OF DEATH, BY COMMUNICABLE DISEASES AND MATERNAL, PRENATAL AND NUTRITION CONDITIONS (% OF TOTAL)	28	4
IMMUNIZATION, DPT (% OF CHILDREN AGES 12-23 MONTHS)	87	99
PREVALENCE OF ANEMIA AMONG PREGNANT WOMEN (%)	51	27
BIRTHS ATTENDED BY SKILLED HEALTH STAFF (% OF TOTAL)	81	100
PHYSICIANS (PER 1,000 PEOPLE)	1	2

SOURCE: Health Nutrition & Population Statistics, World Bank, 2017.

derly people in the population has enormous implications for the planning of social security programmes, particularly pensions and health insurance. In order to move forward, India will need to do some serious planning with regard to these issues.

Urbanisation

There is a strong link between the country’s economic trajectory and how it urbanises. Urbanisation is also strongly linked to rapid improvements in social indicators e.g., urban populations generally transition more rapidly to lower fertility rates. Realisation of the “demographic dividend” is therefore crucially linked to India’s urbanisation prospects. India is still predominantly a rural country (see Table 1) and going forward, it will be one of the least¹ urbanised countries even in 2050, with just half of its population living in cities, while China will be 76 per cent urban. Urbanisation in India is strongly driven by migration and therefore, along with adequate decent employment prospects for the working age population, cities must ensure access to basic amenities like housing, water, sanitation,

health and education. At a time when the idea of a ‘smart city’ dominates policy discourse in India, 24 per cent of the urban population still lives in unhygienic slums deprived of basic services.

Skewed Sex Ratio

A recent report from the NITI Aayog² said sex ratio at birth (SRB)³ nationwide had dropped from 906 in 2012-2014 to 900 in 2013-2015, and this has also been the historical trend. In all, 17 of 21 large Indian States saw a drop in SRB. Some of the factors contributing to the preference for sons over daughters in Indian society are the perception of sons as income earners, departure of daughters to husbands’ households after marriage and expectations for a bride’s parents to pay a dowry to prospective in-laws. Skewed sex ratios are an outcome of prenatal sex selection⁴ which though prohibited, is difficult to eliminate⁵. There are concerns that skewed sex ratios lead to more violence against women, as well as human-trafficking. In some Indian villages in Haryana and Punjab, poor sex ratios have led to brides being “imported” from other

States, often accompanied by the exploitation of these brides.

Health

While the changing age distribution of the population can eventually lead to an increase in the supply of working age population, it may not necessarily lead to an increase in productivity, without significant improvements in the health status of the population. Secondly, increased longevity in itself may not be accompanied by increased savings because of the increase in disease burden across all age-groups (despite longer life spans) and a consequent rise in healthcare expenditures. Home to 17.7 per cent of the global population, India accounts for 20 per cent of the global burden of disease. India accounts for 27 per cent of all neonatal (up to 28 days from birth) deaths and 21 per cent of all child deaths (younger than 5 years) in the world. Easily avoidable diseases like tuberculosis, diarrhoeal diseases, malaria, and typhoid continue to be the leading causes of burden among communicable diseases. On the other hand, non-communicable diseases contribute to 52 per cent of all disease burden and more than 60 per cent of deaths in the country. It is clear, therefore, that India is experiencing a dual burden of disease. Compounding this burden are widespread inequities in health outcome - large morbidity and mortality differentials across socioeconomic characteristics like caste, class, gender, and location (rural/urban, rich/poor states). In addition, there are huge financial risks associated with health care. Since government spending on health care is extremely low in India (see Table 1), people mostly pay out-of-pocket for medical treatment, which is often catastrophic and push millions into poverty every year.

Education

Despite strides made to close the education gap in India, almost a fifth of the country’s population—266 million adults—are still unable to read and some 12 million children are not enrolled in schools. 35 per cent of the world’s illiterate population lives in India. While enrolment in schools at primary level has increased substantially since the enactment of the Right to Education,⁶ dropouts remain high. Therefore, enrolment in secondary and tertiary levels remains



low, especially among girls. There are also concerns regarding quality of education. The Annual Status of Education Report⁷ for rural India found that one-fourth of the country's youngsters in the 14-18 age group could not read their own language fluently, while 57 per cent of them struggled to solve elementary mathematics. When shown a map of India, 14 per cent couldn't identify it, 36 per cent couldn't name the country's capital and 21 per cent could not point out/name the state they live in, findings that expose the pathetic state of education in rural India.

Unemployment

Every month, a million Indians join the labour force, but the growth in jobs has not kept pace with the rising number of aspirants. Unemployment therefore, has been on the rise, despite India supposedly being one of the brighter spots in a slowing global economy. The agricultural sector, which employs almost

45 per cent of the Indian population (with only a 15 per cent contribution to GDP), is still the largest employer. While service sector-led growth contributed greatly to India's GDP, especially after liberalization, its employment elasticity has been low. Labour-intensive manufacturing has not exactly been an engine of growth for India, as it has been in China. Also, traditionally labour-intensive industries are gradually adopting automation, further shrinking job opportunities. The disconnect between economic growth, skilling, education and jobs is growing. This is an alarming situation since India's work force is expected to increase exponentially in the future.

Gender Gap in Employment

Nearly half of India's population are women. However, India's miserable gender gap in the workplace makes it much poorer as a nation, both economically and socially. The World Bank says that the share of Indian women above the age of 15 in its workforce is only 25 per cent (see table 1). It was 34 per cent in 1991 and has been sliding steadily since. In China, the number is 60 per cent. According to the ILO, India ranks 121 out of 131 countries in Female Labour Force Participation (FLFP), one of the worst in the world. Any talk of a demographic dividend is meaningless when one half of the population does not

participate in the economy. The reasons are many. First, India is still a deeply patriarchal society where most Indians subscribe to the stereotype that a man's place is in the workplace, a woman's is at home. Lack of support infrastructure e.g., public transport, child care support etc., and a general concern over safety makes it more difficult for aspiring women workers.

Poverty & Inequality

Despite higher rates of economic growth post-liberalization (1991), and particularly during the last decade, the benefits have not trickled down to most Indians. Despite India's relatively large middle class, many struggle to secure basic daily needs. About 25 per cent of Indians live on less than \$2 a day and the country accounts for one in three of the global population living in poverty. On the other hand, according to the World Inequality Report 2018, the top 10 per cent of earners accounted for 55 per cent of the national wealth in India in 2016. It was 47 per cent for the US, 37 per cent for Europe and 41 per cent for China. Such high levels of poverty and wealth concentration can destabilise a society and put the brakes on a country's aspiration to become an economic super power.

Regional Disparity

To add to its vastness, India is diverse and uneven – it has 29 states and 7 Union Territories, each having a unique demography, history and culture, dress, festivals, language, food etc. Uttar Pradesh, the most populous state in the country, has almost 200 million people, while Sikkim, the least populous state, has a population of just over half a million. The proportion of urban population in the states ranges from 10 per cent (state of Himachal Pradesh) to as high as 98 per cent (state of Delhi & the National Capital Region). There are 22 different languages that have been recognised by the Constitution of India. While the literacy rate for the country as a whole stands at 74 per cent, it is just 65 per cent for females. Also, while 94 per cent of the residents in the state of Kerala are literate, for Bihar (another state), it is just 63 per cent. The infant mortality rate is 47 in the state of Madhya Pradesh, while just 10 in Kerala. The per capita domestic product of the richest state is 8 times that of the poorest. India has significant interregion-

al and interstate demographic diversity based on the stage of demographic transition and variations in the onset and pace of fertility transition. Consequently, there are considerable variations in the age structure of the population, including the ageing experience.

Conclusion

Countries with the greatest demographic opportunity for development are those entering a period in which the working-age population has good health, quality education, decent employment, gender equality and a lower proportion of dependents. Currently, India falls considerably short of attaining these objectives. As a result, without proper planning, there is a chance that the so called demographic dividend could turn into a demographic curse.

1. As per recent studies, the Indian “urban” definition is among the most stringent in the world, involving three criteria—population size, population density, and the proportion of adult males employed in agricultural activities. Most countries have two criteria; some have just one. If we drop one of our criteria, the urban proportion is 40-70% versus the current official estimate of about 32%.

2. The National Institution for Transforming India, also called NITI Aayog, was formed via a resolution of the Union Cabinet on January 1, 2015. NITI Aayog is the premier policy ‘Think Tank’ of the Government of India, providing both directional and policy inputs. While designing strategic and long term policies and programmes for the Government of India, NITI Aayog also provides relevant technical advice to the Centre and States.

3. SRB is the number of girls born for every 1,000 boys.

4. Ultrasound scanning to abort female fetuses.

5. Although the Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act of 1994 bans foetal sex disclosure to parents, and dozens of doctors have over the past decade been penalised for violating the law, activists say doctors continue to collude with parents.

6. The Right of Children to Free and Compulsory Education Act or Right to Education Act (RTE), is an Act of the Parliament of India enacted on 4 August 2009, which describes the modalities of the importance of free and compulsory education for children between 6 and 14 in India under Article 21a of the Indian Constitution. The Act makes education a fundamental right of every child between

the ages of 6 and 14 and specifies minimum norms in elementary schools.

7. The survey for the Annual Status of Education Report for rural India in 2017 was carried out in 28 districts spread across 24 states.

POPULATION AGING, HEALTH CARE AND FISCAL POLICY RE-FORM THE CHALLENGES FOR JAPAN

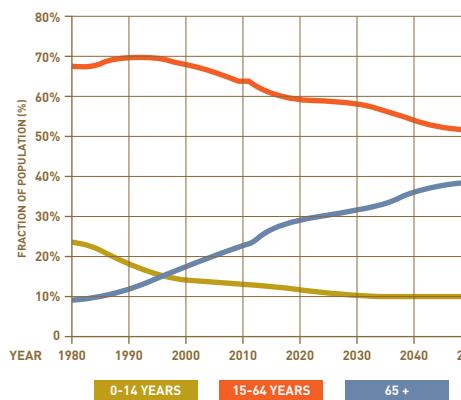
Minchung Hsu

ASSOCIATE PROFESSOR, NATIONAL GRADUATE INSTITUTE FOR POLICY STUDIES (GRIPS), TOKYO, JAPAN.

JAPAN HAS THE OLDEST POPULATION IN the world, due to the improving improvement of life expectancy and the declining birth rates for decades. In 2016, 26.6% of its Japan’s population was 65 years of age or older, while this ratio in OECD countries was 16.5% on average. Furthermore, this old-age population share in Japan is projected to reach 40% by 2050 (see Figure 1a).

FIG 1
AGING IN JAPAN

1A | JAPAN'S POPULATION STRUCTURE 1980 - 2050



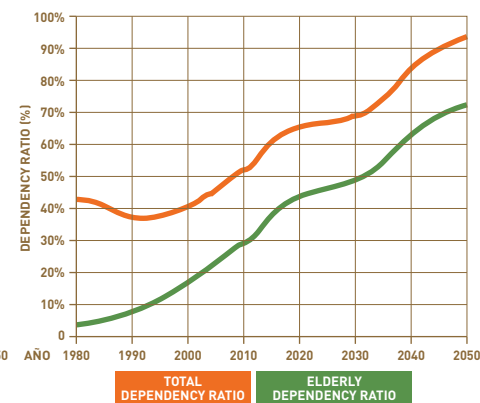
The large aging population with a long life expectancy (87 years) implies a huge demand of health care and an extraordinary burden of financing it. In addition, the fertility rates in Japan have been well below the replacement rate since the mid 1970s (1.44 births per woman in 2016). Therefore, the working-age population (age 15-64) is projected to shrink to 50% of the total population in 2050 with the old-age dependency ratio rising to

80% (see Figure 1b).¹

In my recent research (joint with Tomoaki Yamada and forthcoming in Scandinavian Journal of Economics), we develop an economic model, which is able to represent the current Japanese economy in terms of key economic and demographic features, and simulates a large number of agents over the life cycle in the mentioned model in order to study the impacts of population aging and investigate the welfare implications of prospective policy reforms for current and future and current generations in Japan. We emphasize the cost of maintaining its universal health insurance (UHI) system that provides health insurance coverage to all residents, as in most OECD countries, for the following two reasons. First, under the current system, the burden of financing health care falls primarily on the working-age population (age 15-64), which is shrinking quickly. Currently, there are approximately 90% of the UHI’s costs financed by general government revenues and a premium (a payroll tax) that is levied on employers and workers.

Second, the elderly face greater health risks and require much more care than young people. The current data shows that the average per-person medical cost for individuals

1B | JAPAN'S DEPENDENCY RATIOS 1980 - 2050



aged 65 and above is approximately four times more than that of those under age 65 (see Table 1). Figure 2 shows the sharp increasing trend of medical costs in Japan., as As a result of population aging, If the current UHI system is to be maintained, then either the government subsidy or the insurance premium (which is charged to workers and employers) must be raised to finance the additional cost of health care. Either way, the financial burden

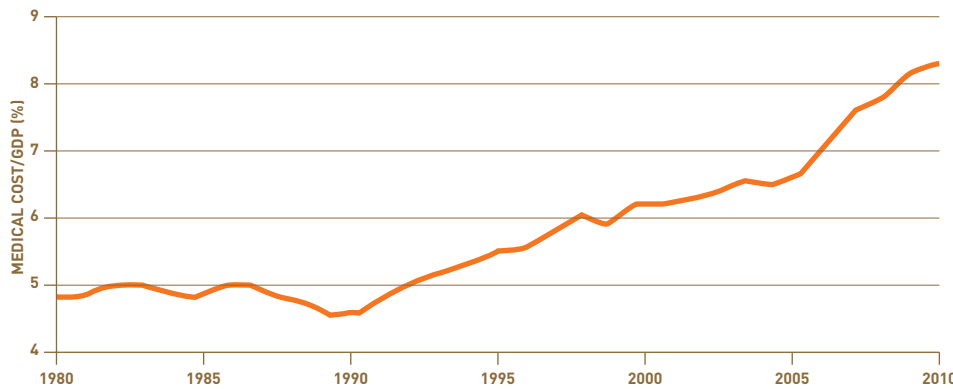


TABLE 1
MEDICAL COST OVER AGE GROUPS

AGE GROUP	PER PERSON MEDICAL COST (1,000 YEN)	PERCENTAGE OF TOTAL AVERAGE (%)
TOTAL	307.5	100.0
UNDER 65	177.1	57.6
65 +	717.2	233.2
75 +	892.1	290.1

SOURCE: Estimates of National Medical Expenditure, Japan, 2012.

FIG 2
TREND OF JAPAN'S MEDICAL CARE COST 1980 - 2012



on the working age population will increase.

Although Japan is specifically studied, the implications of the impacts of aging and policy reforms from the study on Japan may also be relevant apply to most OECD countries with public UHI systems and to those emerging economies that are establishing their UHI system and expecting rapid population aging

(e.g., Brazil, China, Mexico, Thailand), as these countries may face similar challenges in the near future.

Based on our simulation results, we suggest that without any reform, as a lower bound, an additional 5.7% tax on labor income will be required to finance the increased UHI costs with the projected 2050 population age structure. However, a higher tax burden on the working-age population is undesirable because it discourages labor supply and furthermore, it undermines the abilities of young

individuals to save and to smooth consumption over the life cycle. Potential reforms that lower the income tax burden on the young are expected to reduce the negative effect of aging under the current UHI/tax system.

We specifically study two types of reforms – an UHI policy reform (increasing private share of the medical cost, e.g. a co-payment

increase) and a government financing policy reform (using non-labor taxes, e.g. an additional consumption tax) – which have been largely debated in Japan. We find that both types of reform policies can reduce the burden on the young and bring significant welfare gains for future generations. The welfare gains primarily arise from 1) The An increase in consumption levels due to more capital and labor inputs and 2) the An improvement in the improved allocation of consumption over the life cycle.

However, we find that the implementation of such reforms is politically difficult

– the support rates of current population for these reforms (the percentages of the population who would experience welfare gains from the reforms) are all below 50%, indicating that it will be difficult for the reform proposals to gain the support of a majority of the population without any compensation. In particular, immediate reforms are significantly harmful for current residents. Older unhealthy people who are close to retirement age or who have already retired would encounter large welfare losses, as they would have little or no time to prepare for the policy changes that cause a more expensive (and more risky, in the case of a UHI co-payment increase) retirement life (e.g., by accumulating more savings)when they are capable to such preparation (i.e., when they are young/working).

Our experiments suggest that a consumption tax increase has a less negative effect on those who are currently old or unhealthy than a UHI copayment increase because (non-medical) consumption is smoother over on the life cycle and rich and healthy people consume more. Furthermore, a gradual reform, compared with an immediate reform, has less influence on the current population, especially the elderly, by giving them more time for preparation.

However, we find that substantial compensations are necessary if we aim to reach the support of such that the majority of the current population for such reform would support the reforms. Therefore, we further ask whether the welfare gain from a policy reform received by future generations is able to compensate the welfare loss on current population due to the reform if the government can make transfers across generations. We suppose that the government is able to borrow from the

future to finance the needed compensation by issuing bonds. We find that the interest rate on government bonds is crucial. In recent years, interest rates on Japanese government debt have been below 1%. If we assume that the government can continue to issue debt at an interest rate at 1%, the compensation will be affordable (i.e. the present value of total future welfare gains is greater than the necessary compensations) when if the reforms are implemented gradually. Compensations for immediate reforms will be too costly even if the interest rate is low. If the low interest rate for Japanese government bonds cannot be maintained, any type of these reforms will be difficult to implement. Moreover, Japan has the highest debt-to-GDP ratio among advanced economies. According to the OECD, Japan's net debt to GDP is about 116%, and its gross debt to GDP is will be above 200% by the end of 2010. This fact may constrain the government's ability to issue more bonds for the compensations that makes the reforms even more challenging.

1. Projections are based on the estimates offered by the National Institute of Population and Social Security Research released in 2012.

DEMOGRAPHIC REGRESSION AND FEAR OF IMMIGRANTS IN RUSSIA

Vladimir A. Kozlov

ASSOCIATE PROFESSOR AND RESEARCH FELLOW, INSTITUTE OF DEMOGRAPHY, NATIONAL RESEARCH UNIVERSITY - HIGHER SCHOOL OF ECONOMICS, MOSCOW

DEMOGRAPHIC SITUATION IN RUSSIA

The current Russian population is estimated to be 146.9 million, which situates the country in 9th place among the top 10 most populated states in the world. However, the Russian Federation began the period of independence with a population of 148.5 million, a decline of 1.6 million. If we calculate the population within the matched borders (without including Crimea, which became a part of Russia in 2014) the decline could be about 4 million.

Looking at the current demographic statistics one could say that the situation in Russia is more or less stable and improving. Fertility, in comparison with the EU average, was about 12% higher in 2015, 178 children were born to 100 women in Russia against 158 in Europe. 2015 was a "golden year" for Russian fertility, as it was the highest within the country's independent history, in other words since 1922. Only in fertility leading countries of the EU such as France, Ireland, Sweden, and UK was the indicator higher. However, the success was not followed up, and in 2016 fertility decreased slightly and in 2017 the number of children per mother dropped seriously to 1.62, which is still higher than in the EU or the average in the mid 2010s. There were several reasons for this decline and its potential scales are not yet defined.

It is important to know, that even taking into account the observed improvement in Russian fertility, it is still significantly below generation replacement level. As a matter of fact, for women who have completed or almost completed their reproductive life cycle (those born between 1968-1972) the number of children was about 150 per 100 women, which means that the next generation is more than a quarter smaller than the previous. Of course, it seems to be the generation with the lowest possible fertility in current Russian history suffering from the transition crisis, but experts do not know how strong the recuperation of fertility could be for the next generations.

Life expectancy, on the other hand, is strikingly lower in comparison with EU countries. For example, in 2017 life expectancy in Russia was equal to 72.7 years, while in Europe for 2015 (the latest available statistics) it was 80.6 (even higher in 2014 at 80.9), so it is 8 years higher, without taking into account the possible improvement of EU health conditions within the forthcoming 2 years. Russian mortality is higher than in EU outsider Bulgaria. Another remarkable characteristic of the Russian mortality pattern is a huge gender gap - about 10 years in 2017, (as life expectancy for women is 77.6, for men it is 67.5) while in the EU it is lower than 5.5. Nevertheless, life expectancy for women is still about 0.6 years lower than in lackluster Bulgaria. However, there has been remarkable progress in mortality decline in Russia with the generational

shifts towards healthier lifestyle (first of all the decrease in tobacco and alcohol consumption), growing security of the environment and medical innovations. All these, and additional factors led to the growth of the total life expectancy to 3.8 years from 2010 to now, and since the period of revitalization of life expectancy in 2003, (since this year the annual indicators demonstrated the improvements) the progress is almost 8 years.

Nevertheless, the Russian demographic pyramid is characterized by waves and the current ones are unfavorable as they lead to the forced ageing of the population. Within this process the number of deaths will have a strong tendency to grow as well as the number of births to decline. The potential workforce (working age population) has been shrinking at a quick pace since 2007, and nowadays, the decrease is higher than 900 thousand per year. Even taking into account that the figures are based on the Russian pension system approach (the retirement age for women is 55 years and for men - 60), and looking at the number of people aged 20-64 (more comparable to the real situation), we see that this age group is depleting at a growing pace since 2013 (now at the level of more than -700 thousand per year).

The role of migration

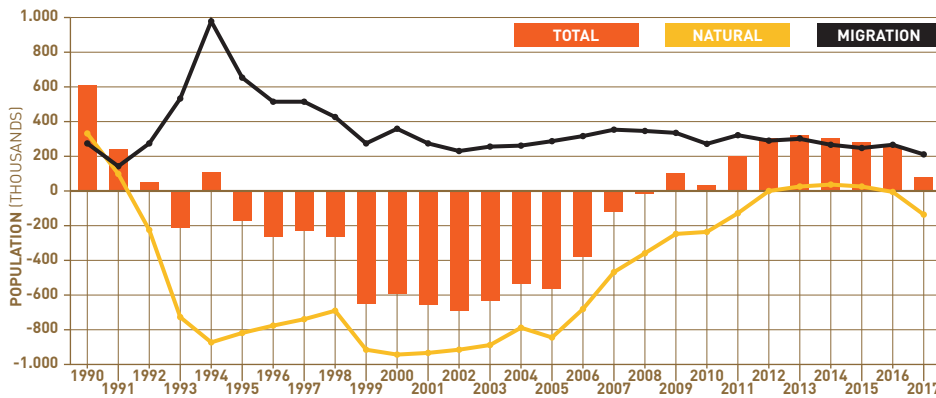
Under the above-mentioned circumstances, the role of migration as a factor in population growth in Russia is crucial and obvious, and we should say that it has always been the case. Since independence in 1992, natural population growth was observed in Russia only for the period 2013-2015 and the cumulative natural decrease was 13.3 million. Nevertheless, the total figure for migration increase during the 25 years of modern Russian history is close to 9.4 million.

As a result in absolute figures Russia is one of the world centers for migration stocks. Although in relative figures the share of people born-abroad in Russia is moderate - slightly more than 8%, it is about 11.5 million in absolute figures. This indicator brings the country to 4th place in the world after the USA, Saudi Arabia and Germany.

The population projections by the Russian statistical agency can only highlight the important role of migration. So, for example, according to the middle scenario the project-

PICTURE 1

DIFFERENT FACTORS OF THE POPULATION CHANGES IN RUSSIA



ed migration increase for the period 2018-2035 should be about 5 million (about +280 thousand of the net migrants per year), and the expected Russian population will decrease by about 1 million, so the natural decrease will be -6 million from now till 2035. Moreover, the high scenario, that includes growth of more than 10 million, assumes migration growth of more than 8.1 million for the period -that is about 450 thousand on average within the period until 2035 (and 80% of the predicted population growth is explained by migration).

Generally speaking, the middle and long-term discrepancies in Russian and UN for Russia population forecasts are mainly explained by the differences in migration predicting strategies.

Moreover, the importance of migration is being emphasized even more with the forecasts about the ageing population in Russia. According to the middle scenario, the labour force in Russia will decline for the next 10 years, although the pace of this decline will be moderate, followed by a period of recovery, and the cumulative losses to the labour force due to ageing from 2018-2035 are expected to reach 3.2 million. The low migration scenario promises the non-stop decrease of the labour force each year with final losses of about 7.1 million.

It is important to note that the role of migration in the economic recovery of the Russian Federation after the economic collapse of the 1990s was estimated, by different specialists, as about 1/3 of the economic growth before the 2008-2009 crisis.

So, the demographic future of the Russian Federation heavily depends on migration flows. We should say that it is a really worrisome situation that the migration increase in

Russia is beyond the middle scenario of the demographic forecast and in 2017 reached the lowest mark for the whole period of independence since 1992 - only 212 thousand.

Characteristics of Russian migrants

First of all, within the period of independence there were different waves of migration to Russia. For example, the current migration flow is different from the previous one, observed in the 1990s. At that time we could talk about the return migration of the Russian-speaking population from the Newly Independent States, due to ethnic clashes, political chaos and economic instability. This flow was not only culturally close, but the migrants in general, had higher skills and were much better educated than the overall Russian population. Actually, this situation allowed Russia to be in top5 countries with the highest number of migrants. The majority of these people were born in Soviet-republics during the Soviet time period (especially in Ukraine or Kazakhstan). Actually, the reverse situation is still obvious for the above-mentioned countries.

The current portrait of the migrant is different, as the person generally belongs to the ethnic majority of the sending country. According to the Russian census for 2002 and 2010, the ethnic groups of Uzbek, Kyrgyz and Tajik demonstrated the fastest growth among the other nationalities. The current donor in the migration sending countries is first of all Ukraine (net migration for 2017 is about 50 thousand), Tajikistan (about 31 thousand), Kazakhstan (about 30 thousand) and Uzbekistan (about 20 thousand). The same situation was observed during the previous year- 2016. The situation started to be like this after the crisis in Ukraine, with a growing number of

Ukrainians in the migration flows towards Russia. Prior to 2014, for the several years the leader in number of migrants coming to Russia was Uzbekistan, the highly populated Central Asian country.

The migrants are mainly male, with a relatively low level of education, but the level of female migration is growing; and education is much higher among the Ukrainian representatives.

In addition to permanent migration, labour migration also plays an important role in the Russian economy.. Russia is one of the world leaders in labour migration (both legal and illegal). We should highlight that in some cases permanent and temporary migrants, due to the peculiarities of Russian statistics, are mixed as labour migrants in some cases spend more than 9 months in Russia before returning home.

The total number of migrants coming to Russia as a temporary work force is estimated at 4.5 million for the years 2015 and 2016. Slightly more than 1.5 million work legally (with licenses, quotas, official work permits), and 850 thousand came from the Eurasian Economic Unit (under the free labour market regulations).

One of the indirect measures demonstrating the high level of labour migrants in Russia is the remittances statistics, by which the country was in 3rd place in the world for 2014 as a remittances donor after the USA and Saudi Arabia. Previously, during the early 2010s, Russia was stable in 2nd place, but after the outbreak of the crisis in 2014 and the devaluation of the ruble as the national currency, the economic attractiveness of Russia dropped. In 2016, Russia was no longer in the top5 donor nations; it was in 6th place with 16.5 million USD. Moreover, with the improving situation making the legalization of labour migrants easier, the legalization procedures became more expensive (the permits for labour migration were more expensive and quotas for skilled migrants were restrictive) and the penalties for immigration law violations (even minor violations) became much stricter. As a result, by some estimates, up to 10% of the male labour force in Kyrgyzstan and Tajikistan was unable to cross the Russian border; they were prevented from doing so mainly due to some minor immigration offences.

Nowadays, in relative figures remittances

from Russia are equal to about 1/3 of the Kyrgyz and ¼ of the Tajik GDP, while it used to be equal to almost half.

The situation becomes more confusing from a statistical point of view. As the member countries of the Eurasian Economic Unit do not require special permission, the migration flows from Kyrgyzstan, Armenia and Kazakhstan and Belarus cannot be correctly estimated. Nevertheless, in an attempt to estimate labour migration we should say that they are mainly from Uzbekistan (more than 1/3), Tajikistan (about 20%) and about 10% from both Kyrgyzstan and Ukraine. The role of countries beyond post-Soviet space, like China, Vietnam or North Korea is small.

The influence of migrants on fertility and mortality patterns has just started to be taken into account, and at present there is not enough information to say anything proven about it.

Attitudes towards migrants

Surveys of labour migrants organized in Russia and in the countries of origin demonstrate that Central Asian labour migrants are generally coming from rural areas. They are mainly unskilled and poorly-educated, young (mean and median age is below 30) and mainly male (however, for Kyrgyzstan female labour migration is increasing). Migrants are ready to work up to 1.5 times longer in comparison with the local population for the same and even less money. They generally avoid labour contracts that could protect their rights, and medical insurance (actually there is a current network of healthcare services organized by migrants for migrants which is widespread in big cities). There are still high unmet needs for Russian language courses among migrants.

The attitude of the local population towards migrants is not an easy task to discuss. The annual Levada-Centre survey monitoring Xenophobia in 2017 demonstrated an improving trend. The percentage of Russians who wanted to restrict the rights of several nationalities (at least one) to live in the country dropped to 54%, which is relatively high in comparison with the EU, but it was nevertheless, the lowest level of this indicator for the whole period (13 years) of such observations. In 2013, it was 81%. Regarding Central Asian migrants, the improvement was even more remarkable – from 45% of respondents who wanted to impose restrictions on their stay in

2013 to 22% in 2017. 28% of the Russian population in 2017 were against any restrictions to live in Russia for the migrants (in 2013 the figure was only 11%). As for the attitudes towards the migration flows, in 2017, 58% of Russians thought that they should be controlled and restricted, while in 2016 the figure was 68%. Also, it is possible to say that Russians think neutrally (60%) about the migrants already leaving with them. However, there should be certain improvements in these questions, as only 8% mentioned positive feelings and 30% - negative (are afraid or dislike).

Criminal statistics do not show the outbreak of the number of crimes committed by migrants, especially if we do not take into account immigration rules violations. Also, surveys of employers do not show the tension or competition between migrants and the local population in the labour markets. So, the overall negative attitude of the Russian population towards migrants, who are the main engine of the country's demographic development, is changing to become more tolerant.

LATIN AMERICA 2050 THE NEW WORLD'S TRANSITION INTO OLD AGE

Christopher Wall

DATA SCIENCE ANALYST FOR GIANT OAK CORPORATION. PROFESSOR OF THE NAVAL SMALL CRAFT INSTRUCTION AND TECHNICAL TRAINING SCHOOL OF THE UNITED STATES NAVY WHERE HE TEACHES COURSES ON COUNTERTERRORISM, COUNTERINSURGENCY AND GRAND STRATEGY. CO-AUTHOR OF THE BOOK 'THE FUTURE OF TERRORISM: ISIS, AL-QAEDA, AND THE ALT-RIGHT'.

THE FIRST TWO DECADES OF THE CURRENT century have proven to be some of the most stable and prosperous years in Latin America's history. With few exceptions, democratic governance has become the norm across the region, and all major conflicts have either ended or are on their way towards finding resolution. In addition, the region is richer than it has ever been. Starting in 2004, the whole of Latin America experienced a commodities boom that helped expand the region's middle class and bring



millions of people out of poverty. The taxes generated from this wealth helped governments in the region expand their investments in education and in their country's infrastructure to amplify this growth for years to come. Yet, there is reason to believe that the whole of Latin America might begin to destabilize within the next two generations. Driven by decreases in the region's fertility and mortality rates and increased emigration, by 2050, Latin America will face a demographic challenge unlike any other in the world. According to the United Nations, within the next 20-30 years, Latin America's population will stabilize at around 779 million people. In the same period, the median age in the region will grow from 27.3 years in 2018 to 40.6 years, and the share of the population aged 65 and above will grow from 10% in 2010 to an estimated 25% of the population. With a life-expectancy pushing 75 years and older in some countries, providing social services to tend to Latin America's greying population will consume a greater portion of the region's GDP, reducing the available funds for other necessary societal investments. Unless addressed proactively in the next few years, the transition towards an older society will become an immense economic burden with important political consequences.

By definition, a society transitions into an elderly one when the proportion of adults participating in the labor market peaks and then declines due to old age. This phen-

omenon occurs for a variety of reasons. In some cases, aging is a factor of needing less workers as a society transitions away from a labor-intensive economic system, such as agriculture, encouraging fewer births. In other instances, adults delay pregnancy until later in life to maximize their career opportunities, reducing the number of child-bearing years. Regardless of the reason, if the average number of children per woman drops below 2.1, then a society is below population replacement levels. In the long-term, this type of demographic transition proves disruptive for two reasons. First, an aging population limits a country's economic capacity, both by reducing the size of the workforce, and by increasing the tax burden upon a shrinking workforce, which in turn limits government resources for continued societal investments. Second, until recently, the expected norm in many countries was that children would provide for their parents as they began to age. This stops being feasible when both the proportion of children available to support aging adults declines and the life expectancy of adults allows many of them to see their children reach old age themselves. In China for instance, the age imbalance is so severe that every child born today is expected to support two adults and four grandparents. To compensate for this demographic inversion, many governments have assumed the responsibility of caring for the elderly through welfare programs, which is a costly endeavor. Next to infants, older adults are the individuals most prone to illness.

The challenge of course is not necessarily the process of aging, but rather how it occurs. The moment before this transition commences is what economists refer to as the demographic window. The World Bank considers this period as the optimal moment to increase societal savings and to make investments into healthcare and welfare systems, for it is theoretically the moment when a country is at its most productive. If managed correctly, a situation arises reminiscent of the experiences of Europe, North America, and Japan. In these societies, aging has been an ongoing process for at least 50 years, and in some instances, the past 70 years. In an effort to confront their respective demographic transitions, these societies have invested heavily in their infrastructure

to care for the elderly, improving their public health services and establishing robust pension systems. These investments have proven fruitful. In 2017, the British magazine *the Economist* reported how the relative health of people aged 65 in these rich societies is now comparable to that of someone 20 years younger in the developing world. In addition, these societies have also managed to offset declines in economic productivity through investments in education and technology, especially automation, which augments the working capacity of adults, permitting them to work well-past retirement age if they desire. In other circumstances, because of less restrictive immigration policies, many of these societies have simply imported youth from the developing world, helping maintain their economic competitiveness on the global stage. As a result, expenditures on health and welfare have not grown as dramatically as an aging society would normally imply.

Latin America will undergo this demographic transition quite differently. Not only is the region experiencing the population transformation in a shorter period, it is doing so with less resources to help mitigate the economic strains. Even though inequality has decreased since the year 2000, according to a 2015 report by the American National Academies of Science, 78% of the region's wealth still belongs to 10% of the population. This means that many of those who transitioned to the middle class in recent years lack large savings accounts to support them into their golden years, making it likely that many Latin Americans will need to work well past retirement age to not become poor. Even then, these improved conditions do not account for the extreme poverty that remains rampant in many parts of Central and South America, meaning that some adults simply lack any form of savings. For some adults, there is a real possibility that they will need to work until the day they perish to make ends meet. Indeed, what ultimately exacerbates the problem of savings is that public corruption is endemic in many Latin American countries, which precludes governments from maintaining strong welfare systems. For instance, in 2015, protestors nearly derailed Honduran President Juan Orlando's administration after whistleblowers revealed the government had pilfered millions of dollars from the country's

social security fund. Honduras is fortunate in that it will not begin the process of aging until later than the average Latin American country, but this dwindling social security fund will negatively impact many of the country's elderly if not replenished soon.

Demographic aging is problematic on its own. Unfortunately for Latin America, this demographic transition is occurring within the broader public health crisis posed by climate change. As researchers from the Center for Disease Control in the United States explain, the warming climate will increase the rate of transmission of communicable diseases, as more parts of the world become hospitable to dangerous bacteria and viruses. The elderly, with their weakened immune system, will have a heightened risk of being infected, increasing their rate of hospitalization and the funds needed to treat them. Moreover, what makes Latin America particularly susceptible to the spread of disease is the high rate of urbanization, with 80% of the region's population living in cities. While some cities like Santiago or Montevideo boast modern public health systems, many countries in Latin America contain immense urban slums where clean water and working sewage systems are luxuries, all of which tend to amplify the rate of disease contagion. In 2015-2016 for instance, the world witnessed how Brazil struggled to stop the spread of the Zika virus. This virus, carried by mosquitoes, found a hospitable environment in the favelas of Rio de Janeiro and Sao Paulo. Before regional officials could contain the virus, an estimated 116 million Latin Americans had been exposed to Zika, with many now suffering long-term neurological disorders as a result of the infection. Undoubtedly, the increased likelihood of diseases spreading in the 21st century will further constrain the available resources for aiding the elderly.

With this in mind, it is important to note that variation does exist at the sub-regional level, and countries will experience the demographic transition differently. In fact, some countries have already begun to age and their ongoing experiences give indications of what might occur in other parts of Latin America. Consider the comparable situations of Cuba and the Dominican Republic. Both Caribbean countries began to age in the late 20th century, with Cuba beginning in the early

1970s and the Dominican Republic starting in the 1980s. Furthermore, both countries are considered developing nations, with Cuba having a GDP per capita of \$7,602 compared to the Dominican Republic's GDP per capita of \$7,114 in 2015. Yet, in terms of the quality of life for the elderly, Cuba edges out its neighbor even though it's aging at a much higher rate due to its lower birth rate (1.61 births per woman compared to 2.45 births per woman in the Dominican Republic). Much of this has to do with its healthcare system, which the United Nations ranks above that of several European countries. Despite being relatively impoverished, the occurrence of infectious disease in Cuba is low and its life expectancy rate is actually higher than that of the United States. The Cuban government has not made commensurate investments in its pension system however, despite its promise to take care of its citizens from the cradle to the grave. In turn, this has forced many elderly Cubans onto the streets to work menial jobs to help support their families. But in comparison to the Dominican Republic, Cuba's conditions are tolerable. In terms of access to quality of healthcare and life expectancy, the Dominican Republic scores much lower than its island neighbor. Likewise, in terms of social security, its pension system is no better than Cuba's. A 2016 report by the Dominican Republic's National Statistic Office found that only 11.2% of its elderly population had a pension, with 3/4 of this cohort receiving benefits below the poverty level. Not only do the Dominican Republic's citizens have to work past retirement, they must do so with worse health outcomes in old age.

Cuba and the Dominican Republic are one extreme of the spectrum. On the other end are countries like Uruguay and Costa Rica. These latter two countries have both begun aging as well but will most likely manage the transition better than their neighbors because of their heavy investment in their human capital. Costa Rica famously dismantled its military in the 1940s to invest those funds in education and healthcare. Today, Costa Rica offers universal healthcare to all of its citizens and permanent residents, and runs a capable state-run pension system. Uruguay for its part has a quality of life comparable to that of many European countries, outranking all other countries in the region. In 2016, recog-

nizing the coming demographic difficulties, Uruguay began an ambitious financial restructuring program in partnership with the World Bank to increase the savings rate for its population, hoping that these additional savings could buttress the country's robust social security program. In this way, both countries provide strong welfare programs for the elderly that reduce the need for this population to work past retirement, while continuing to invest in their public infrastructure to maintain economic growth in spite of the decrease in the work force. While these measures do not solve all the difficulties associated with an aging population, they have bought these governments time to proactively design public policies for the long-term problem of keeping their economies productive.

These four countries reflect two potential paths for the rest of Latin America, yet are unlikely to reflect the course most countries will take. What is more likely to happen is something in-between because of the political and economic permutations within the region. Consider the case of Mexico. At the national level, the country is one of the wealthiest in the region, with an active membership in the OECD, making it seem as if Mexico is one of the countries better prepared for the changing demographic landscape. This is only partially true, for when considering statistics at the sub-regional level, stark differences emerge. In Mexico, the richest political entity is that of Mexico City, which had a GDP per capita of \$23,130 in 2007 and a poverty rate hovering around 29% in 2015. In contrast, the poorest state in the country, Chiapas, had a GDP per capita of \$3,647 in 2007, and in 2015 had a poverty rate of nearly 75%. A better point of comparison for both entities are Nicaragua and Honduras, as these each have a poverty rate of 30% and 62.8% respectively according to the World Bank. Moreover, both Mexico City and Chiapas experience aging at different rates. The fertility rate in Mexico City is 1.52 births per woman, well below the replacement rate. In Chiapas, the rate is 2.47 births, slightly above replacement but beginning to decrease.

Regardless of the country, the main problem for Latin America is the fact that it began to age long before it modernized, and now needs to design public policies to accommodate the elderly before they overwhelm the

region's fragile economies. Aside from the economic burden aging creates throughout the region and the ensuing economic slowdown, it also means that the present social conditions are unlikely to change. Immense inequality, the great economic villain of Latin America since decolonization, is likely to begin growing again, as fewer adults will have the opportunity to participate in a growing and dynamic economy. In addition, pension systems will likely crystallize the economic fortunes of individuals that retired, further limiting their ability to rise up the income ladder.

The most interesting concerns are the implications of a demographic transition of this magnitude for politics. Over the past twenty years, Latin American citizens have become accustomed to improved economic conditions facilitated by state investments in roads, schools, and other public works. However, the political economy of aging means that more and more funds will be diverted towards tending to the elderly, increasing the likelihood of political polarization because of relative deprivation. According to political scientists, this latter situation arises when individuals accustomed to a certain lifestyle suddenly find it untenable due to changing political circumstances, creating grievances that lead to people supporting extremist politics. This has happened several times in Latin America's history. Both Hugo Chavez and Evo Morales came into office because of the massive discontent caused by severe economic downturns in Venezuela and Bolivia. More worrisome is the risk of civil violence. While the likelihood of armed insurgencies terrorizing the region are far-off possibilities, Latin America may, at minimum, experience a protracted period of violent protests and riots if the economic situation deteriorates significantly. This in turn, may encourage even more extreme policies to contend with this violence, which might create a vicious cycle of violence and counter-violence.

The caveat to all of this of course is that none of the potential harms outlined above are necessarily deterministic. Even though the demographic transition has begun in some countries, in most places, it is not so advanced that sound public policy cannot delay the problems associated with an aging society. Undeniably, high-tech solutions such as those pursued by Europe and Japan are

unfeasible for the region, but simpler, more practical solutions exist, such as tax benefits for individuals with children. No solution will serve as a panacea, the region will need to experiment in social policy to find ways to arrest, or at least delay, the inevitable. Nonetheless, Latin America does face a massive demographic challenge and it must begin addressing it now or risk future instability.

PAYS ARABES PRINTEMPS ARABES ? TRANSITIONS ET CONTRE-TRANSITIONS DÉMOGRAPHIQUES

Youssef Courbage

INSTITUT NATIONAL D'ETUDES DÉMOGRAPHIQUES, PARIS.

DANS L'HISTOIRE DU MONDE ARABE, 2011 restera comme l'*Annus mirabilis*. L'an 2011 marquera l'histoire arabe au même titre que l'arrivée de Bonaparte en Égypte en 1798. Pourtant, peu de personnes, aussi bien dans le monde arabe qu'ailleurs, en Occident par exemple, en sont convaincues. Ce qui nous fait d'autant plus apprécier la réaction d'Emmanuel Macron, le président français en janvier 2018, lors de sa visite en Tunisie, pays qui a porté le printemps arabe sur ses fonts baptismaux. Il a judicieusement rappelé que « le printemps arabe » n'était pas terminé.

En 2011, dans le bain d'optimisme ambiant, on anticipait que les bouleversements en cours, seraient porteurs de transformations considérables: politiques, sociales, économiques, culturelles, idéologiques, religieuses. Sept ans après, on tend à l'oublier, répétant *ad nauseum* qu'au printemps arabe a succédé un « hiver islamiste ». Mais des phénomènes, tels que le printemps arabe, ne peuvent être jaugés que sur le long terme, comme nous le rappelle judicieusement la Révolution Française qui n'a pleinement porté ses fruits que près d'un siècle plus tard.

Les Arabes ont pris le monde par surprise avec la Tunisie au premier rang. Un bouleversement inéluctable comme en atteste la démographie. C'était le cas de

l'Europe dès le XVII^e siècle. La lame de fond de la révolution anglaise de Cromwell s'est propagée au monde entier. Elle ne pouvait épargner le monde arabe. Il vit depuis quatre décennies, les mêmes transformations démographiques, culturelles et anthropologiques que l'Europe. Penser le contraire, c'est se montrer essentialiste, s'inventer un *homo arabicus* ou un *homo islamicus*, par définition rétif au progrès.

La progression de l'éducation, l'éradication de l'analphabétisme d'abord chez les garçons puis les filles, a été à l'origine de ces transformations. Le monde arabe a commencé à se métamorphoser grâce à l'instruction et à la baisse de la fécondité à partir des années 1960 chez les pays les plus avancés. Pour la Tunisie sous Bourguiba, il y avait une volonté de modernisation, par l'accès à l'enseignement pour les deux sexes. Au Maroc c'était le cas des premiers gouvernements de l'indépendance qui avaient fait de l'éducation leur priorité, avant de freiner pour ne pas remettre en question le *statu quo* politique. Jusqu'à l'avènement de Mohamed VI, le Pouvoir a parfois bloqué l'éducation. D'où ce retard d'alphabétisation, surtout des filles et des ruraux.

L'instruction, une fois généralisée, provoque la baisse de la fécondité par le retard de l'âge au mariage et la contraception. L'apport économique de cette baisse n'est pas à démontrer, mais elle peut être source de malaise à l'intérieur des familles. La baisse de la fécondité tombée à deux enfants, dans les pays arabes les plus avancés, a été si forte que les valeurs traditionnelles, patriarcales en ont été ébranlées. En outre, la remise en cause du *pater familias* porte à terme celle des « père des peuples ».

L'endogamie, le mariage préférentiel avec le cousin germain ou avec d'autres parents, cette étanchéité du groupe familial, entraîne la fermeture des groupes sociaux sur eux-mêmes et la rigidité des institutions. Elle est en forte diminution. Lorsqu'elle devient moins endogame, la société s'ouvre vers l'extérieur, est potentiellement plus encline à la révolte quand elle est gouvernée de manière despotique. La scolarisation de masse et la baisse de la fécondité peuvent aussi indirectement provoquer une prise de conscience et des révoltes.

La cellule familiale est aussi boulever-

sée avec des effets positifs, car limiter le nombre d'enfants permet de mieux les soigner, les nourrir, les scolariser... Aussi, dans une famille restreinte, modèle où la famille arabe s'achemine, les interactions père-mère, parents-enfants, deviennent plus démocratiques, ce qui ne peut que se diffuser positivement au plan sociétal. Avant cela, la cohabitation d'enfants instruits et d'un père analphabète mais détenteur du pouvoir absolu était malaisée.

Passer de l'instruction généralisée des garçons puis des filles, stimule l'éveil des consciences par l'apprentissage de la lecture et de l'écriture. La sécularisation, le « désenchantement » du monde, puis la baisse de la fécondité en découleront *ipso facto*. Ce sont des facteurs indispensables à la « transition démocratique ».

Mais il n'y a pas que les jeunes. Certes, les universitaires arabes, filles et garçons, souvent au chômage, se sont révoltés en premier. Mais du Maroc à Bahreïn, tous les âges et étaient présents chez les manifestants.

Cette lame de fonds est aujourd'hui en veilleuse. Mais l'Histoire est souvent écrite avec des hauts et des bas. Rappelons-nous l'Europe il y a un demi-siècle : le bouillonnement de mai 1968, des modes qui se diffusaient vers le monde entier et le monde arabe. Récemment, il ne faut pas l'oublier, les manifestants de Madrid, Barcelone, Lisbonne, Rome et Athènes, prenaient leur inspiration à Tunis ou au Caire ! Un géant comme la Chine, essayait de bloquer l'information sur les révolutions arabes, craignant qu'elles ne déteignent chez lui.

Le monde arabe a été touché par la vague modernisatrice avec un retard de deux siècles. Ce n'est pas grand-chose à l'échelle de la longue histoire. Ses transitions, notamment démographiques, plus tardives qu'en Europe ont été plus intenses, d'où cette convergence démographique. La fécondité des années 70 dépassait 7 enfants par femme, comme au Maroc. Aujourd'hui du Liban jusqu'au Yémen, la fécondité a fléchi, certes à des rythmes différents: au Liban, de 5,5 à 1,6 et au Maroc, de 7,5 à 2,2. Le Yémen « diplodocus » du monde arabe, a lui aussi incurvé sa fécondité pour passer 8,5, un chiffre énorme, à 5 enfants, ce qui reste tout de même considérable, mais néanmoins considéré comme un progrès

significatif. La transition arabe s'est déroulée sur une quarantaine d'années alors qu'en Europe elle aura pris près de 2 siècles.

Partout, l'instruction a précédé les révolutions politiques. Phénomène qui paraît d'une grande banalité, l'accès à l'instruction fait qu'aujourd'hui la proportion des jeunes arabes, garçons et filles, qui maîtrisent la lecture et l'écriture est pratiquement de 100% non seulement dans les pays les plus avancés tels le Koweït, le Liban, la Jordanie et la Palestine mais également dans les moins avancés d'entre eux comme le Yémen, le Soudan, ou la Mauritanie.

La révolution démographique, c'est d'abord la baisse de la mortalité. Dans les années 50, l'espérance de vie à la naissance, n'était que de 40 ans, elle est de 75 ans ou plus maintenant. Quel est le sens de ce progrès du point de vue mental ? Il implique un recul du fatalisme. Avant cette forte baisse de la mortalité, l'individu arabe se ressentait comme l'instrument du *qadar*, du destin, tout était écrit. Il était constamment sous la menace de la mort, par maladie, accident ou autre. Avec une espérance de vie de 75 ans, l'individu se sent désormais immortel. Bien sûr, il ne s'agit que d'une illusion, d'une perception, car l'on sait tous qu'on va mourir un jour ! Mais le fait que les maladies se soient éloignées et la mortalité aussi, donne des ailes. L'individu qui pense qu'il a l'avenir pour lui, peut se lancer dans des projets à long terme. Aujourd'hui, quand il prend sa retraite à 60-65 ans, il ne se dit plus « je vais rentrer à la maison, dormir et mourir ». La baisse de la mortalité a dynamisé le moral des individus.

La baisse de la fécondité qui fait suite à celle de la mortalité, est également très riche de signification. Elle sous-entend que c'est désormais la personne et le couple, et eux seuls, qui décident du nombre de leurs enfants. Il n'y a plus de décision sur le nombre d'enfants imposée par le pouvoir. Aujourd'hui, la décision d'avoir ou de ne pas avoir d'enfant, d'en avoir un, deux ou 10 incombe à l'individu et ceci est une puissante évolution mentale. L'individu devient un créateur.

Le célibat définitif au Maghreb avoisine 10 %, 7-8% au Proche-Orient. Aujourd'hui, la famille ne peut plus imposer un conjoint à la fille. Elle peut préférer rester célibataire

plutôt qu'être contrainte à épouser un homme plus vieux, laid, souvent moins instruit. Et comme nous l'avons vu le mariage endogamique décline: au Maroc par exemple de 30 % (1995) à

15 % (2010). L'endogamie c'était l'étanchéité du groupe familial, une la fermeture des uns aux autres. Le mariage exogamique signifie l'ouverture, le changement, la modernité et stimule le brassage des populations et l'esprit d'initiative.

A l'échelle de la famille, dans les années 1960, c'était le *pater familias*, le père qui décidait de tout. La mère s'effaçait et les enfants devaient obéissance à un père dominateur et beaucoup moins instruit qu'eux. Il jouissait seul de l'autorité et dictait ses quatre volontés à sa femme et à sa famille. La sœur devait obéissance à son frère ; aujourd'hui elle n'accepte plus la dominance de son frère. La contraception, libératrice du corps de la femme, remet en question le pouvoir du mâle sur le corps féminin.

Avec la généralisation de l'instruction, on a donc eu des remises en question en cascade au sein de la famille. La famille est à l'échelle du *micro*, la société c'est celle du *macro*. Les évolutions silencieuses qui se déroulaient au niveau de la famille ne pouvaient pas ne pas se répercuter à l'échelle sociétale. La contestation de l'autorité politique à partir de 2011, répond à la même contestation dans la famille. Quand l'autorité du père est mise en cause, celle du détenteur du pouvoir politique est elle-même menacée. On peut affirmer qu'à famille nombreuse autoritaire correspondait un régime politique lui-même autoritaire et que le passage à une famille restreinte, est une condition nécessaire, même si elle n'est pas suffisante, pour sortir de l'autoritarisme.

Des taux de croissance démographique élevés peuvent compromettre la croissance économique. Or au seuil des printemps arabes, une nouvelle démographie semblait se profiler à l'horizon, ouvrant la possibilité d'engranger des « dividendes » démographiques. Lorsque le rythme de la démographie ralentit, l'emploi productif augmente. Grâce à la hausse des taux d'épargne, de l'accumulation du capital et des investissements, le PIB (global et par habitant) aug-

mente, ouvrant la voie à un avenir économique plus prometteur qu'en cas de croissance démographique forte vu l'accroissement de la population en âge de travailler.

Les modifications des classes d'âge diminuent la pression sur le marché de l'emploi. Avec cette pression moindre les femmes ont plus d'opportunités d'accès au marché du travail. Les sociétés arabes sont traditionnellement patriarcales et le rôle productif y incombe essentiellement à l'homme. Mais on voit de plus en plus de femmes accéder à un emploi, ce qui est un accélérateur de la modernisation des sociétés. Cette appartenance aux forces actives peut faciliter leur entrée subséquente dans la sphère politique.

La diminution de la croissance démographique entraîne une amélioration de la répartition du revenu national par la diminution des inégalités démographiques. Les riches, souvent occidentalisés, avaient un nombre restreint d'enfants ; les pauvres, moins « mondialisés » en avaient bien plus. Les riches accaparaient une part élevée du « gâteau » national, réparti sur un nombre peu élevé de membres de la famille: père, mère, 2-3 enfants. A l'opposé les pauvres avaient 7-8 enfants ou plus. Ils jouissaient de la part congrue du revenu national tout en devant la distribuer à une famille très nombreuse. La diminution des différences de fécondité dans la société suscite donc la réduction des inégalités de répartition du revenu national.

Cette transition démographique, d'aucuns la craignent comme la peste, car elle s'accompagne du vieillissement de la population. En fait, c'est un risque très exagéré. Le vieillissement démographique, n'est pas une réalité immédiate. Il y a moyen d'y faire face notamment grâce à la solidarité intergénérationnelle, une réalité des pays arabes.

* * *

On en venait donc, au tournant de cette décennie, à conclure que la transition démographique était le signe annonciateur de la transition démocratique.¹ Avec le recul peut-on garder le même optimisme ? La démographie récente du monde arabe donne de nombreux signaux ambigus. En Égypte ce pays gigantesque de plus de 100 millions d'habitants, la fécondité qui y

avait baissé est remontée vigoureusement à 3,5 enfants par femme. L'Algérie (41 millions), lui emboîte le pas ; la fécondité à la fin de la « deuxième guerre » y était tombée à 2,4 enfants en 2000, pour remonter à 3,1 en 2016. Certes, l'Algérie n'est pas l'Égypte. L'Algérie a de l'espace, mais elle est tributaire de sa rente gazière. La Tunisie, qui fut le « beau modèle » des démographes et des politologues arabes, précurseur des printemps arabes, est en contre-transition démographique, quoique plus atténuée : 2 enfants en 2000, 2,4 maintenant.

Mais, il y a des contre-exemples, comme au Maroc, où la fécondité baisse et approche de celle de l'Europe : 2,2 enfants. Paradoxalement aussi en Arabie Saoudite et dans les Émirats du Golfe, la fécondité continue de diminuer en dépit de la politique pro-nataliste des pouvoirs, malgré leur grande richesse et la présence de fortes populations étrangères qu'on souhaiterait remplacer par des sujets nationaux dotés d'une forte fécondité. Au Liban le mariage est en crise, notamment à cause de l'émigration qui perturbe le marché matrimonial, augmente le célibat et entraîne des mariages tardifs. La fécondité libanaise baisse dans toutes les communautés : chrétienne, sunnite, chiite...

Paradoxalement, la fécondité reste très élevée dans les pays en guerre. L'Irak malgré l'état de guerre permanent qui remonte à 1980 et synonyme de paupérisation, a maintenu sa fécondité très élevée. Le Soudan, pays en guerre, *idem*. Le Yémen tient le triste privilège d'être le pays arabe le plus fécond : près de 5 enfants. En Syrie, avant la guerre actuelle, la fécondité était toujours élevée et ne baissait plus, des années 2000 à 2010/2011 : 3,5 enfants, sans changement. *Idem*, en Palestine, où la fécondité reste très élevée : 4,1 enfants et en Jordanie.

Ainsi il y a autant de pays arabes où la fécondité est en baisse que de pays où elle reste très élevée ou augmente. Mais en regardant les chiffres sous l'angle de l'accroissement de la population plutôt que celui du nombre d'habitants par pays (l'Égypte a infiniment plus d'importance que le Qatar), on trouve 80% des populations arabes qui vivent des situations de contre-transition démographique.

Cela veut-il dire que le processus de

modernisation démographique s'est brutalement arrêtée ? Est-ce qu'à la transition démocratique qu'on avait vue à l'œuvre dans la sphère familiale, dans la sphère sociale et politique, a succédé une contre-transition démographique et politique, soit l'arrêt du processus de modernisation ? Retourne-t-on aux familles patriarcales, aux régimes autoritaires ?

Le retournement de tendance dans la démographie, ne signifie pas forcément le retour à la tradition, le rejet de la modernité. Ça ne signifie pas que les régimes politiques vont faire forcément machine arrière. Car l'effet de cliquet qui stipule qu'un phénomène peut se perpétuer même si la cause qui est à son origine n'intervient plus, prend toute sa signification ici. Certes, la transition démocratique, a été déclenchée par la transition démographique. Mais l'effet de cliquet veut dire que l'arrêt de la transition démographique ne signifiera pas forcément un recul pour la transition politique. Aujourd'hui d'autres éléments peuvent prendre le relais vers la transition démocratique : le statut des femmes, leur niveau d'éducation, leur rôle de chef de ménage etc.

Certains diront que c'est le « retour à l'Islam », qui expliquerait les contre-transitions démographiques. Pas seulement dans la sphère politique comme l'arrivée au gouvernement du PJD au Maroc (qui n'a pas eu de conséquences démographiques), l'arrivée des Frères Musulmans par le biais du président Moursi au pouvoir en Égypte ou en Tunisie avec l'émergence d'*Ennahda*. Plus que l'islam politique, c'est l'islam domestique qui laisse son empreinte sur la famille et expliquerait la remontée de la fécondité, le retour à la tradition, à l'authenticité, aux valeurs familialistes, avec le devoir d'humilité et d'obéissance des femmes dont le rôle premier serait de mettre des enfants au monde et de les élever.

Or, les données montrent en Égypte et sans doute en Algérie et en Tunisie aussi, que parmi les explications données pour justifier la remontée de la fécondité, la seule qui soit convaincante réside dans l'emploi féminin, qui a beaucoup reculé. Le recul de l'activité féminine a provoqué une remontée du familialisme, le retour des femmes au foyer et la montée de la fécondité.

On ne peut donc pas exclure les femmes du marché de l'emploi et aspirer à une transition démographique harmonieuse. Or, malheureusement, la faiblesse du nombre de femmes actives dans le monde arabe est une certitude qui le met très loin derrière le reste de l'humanité, autour de 22 % de femmes ayant un emploi alors qu'en Extrême-Orient et même en Indonésie, pays musulman le plus peuplé, le taux d'activité des femmes avoisine 70 %.

Il y a aussi des explications politiques. En Syrie, avec un régime à 2 vitesses : la minorité au pouvoir jouissant d'un régime démographique quasi-européen a un taux fécondité de 2 enfants et la majorité de la population soit les $\frac{3}{4}$ est à 5 enfants par femme. En Palestine, le conflit israélo-arabe a poussé de part et d'autre à des fécondités anormalement élevées, pas seulement chez les Palestiniens mais aussi chez les Juifs israéliens. Mais la fécondité des Palestiniens s'assagit alors que celle des Juifs s'envole. En 1992, les Palestiniens avaient 6,8 enfants, ils sont à 4,1 aujourd'hui. Les Palestiniens d'Israël, étaient à 4,30, ils ne sont plus qu'à 3,08, moins que leurs compatriotes juifs, dont la fécondité ne cesse d'augmenter : 2,62 en 1992, pour 3,16 aujourd'hui. Ceci est essentiellement du fait des colonies juives implantées en Cisjordanie et à Jérusalem-Est, ce qui démontre que la fécondité est aussi, dans cette région du monde, un instrument de combat.

1. C'était la conclusion de l'auteur avec E. Todd de l'ouvrage de Youssef Courbage y Emmanuel Todd, *Encuentro de civilizaciones*, Foca Ediciones, Madrid, 2009, 175 págs.





ECONOMIC POLICY CHALLENGES OF AN AGEING EUROPE

Iain Begg

PROFESSORIAL RESEARCH FELLOW AT THE EUROPEAN INSTITUTE, LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE, AND CO-DIRECTOR OF THE DAHRENDORF FORUM (A JOINT INITIATIVE BY THE HERTIE SCHOOL OF GOVERNANCE AND THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE, FUNDED BY STIFTUNG MERCATOR).

Lisa ten Brinke

RESEARCHER WORKING FOR THE DAHRENDORF FORUM - [HTTP://WWW.DAHRENDORF-FORUM.EU/](http://www.dahrendorf-forum.eu/)

DEMOGRAPHIC CHANGE IS AMONG THE most predictable of societal trends because of the well-established behavioural patterns affecting it. Fertility, improvements in health care and life expectancy tend to evolve only slowly. Immigration, as has been seen in recent years, can move more erratically, but only occasionally has a dramatic effect on the composition of the population. Yet, while the demographic data are well-known, there are many unanswered questions about the economic consequences of ageing, what can be done about it and how social and other policies need to adapt to cope with the tensions to which it gives rise.

The scale of the challenge

The most obvious economic challenge is how to pay for the costs of ageing, as the arithmetic linking the capacity of the working-age population to the elderly deteriorates. The projections can appear daunting. On average in the EU today, the crude old-age dependency ratio is 3.38 people of working age (those aged 16-64) for each elderly person (65 years or older). By 2060 this is projected to become 1.94 : 1, having been 4 : 1 as recently as 2010. The ratios for the very old (aged 80+), who typically require significantly more care support, are 12 : 1 today, falling to 4.63 : 1 by 2060.

There are also marked differences between EU Member States, although the same broad trends are visible everywhere. The highest dependency ratios today (at around 3 : 1) are found in Greece, Italy and Portugal in Southern Europe, and Finland, Germany and Sweden in the North. By contrast, the ratio is close to 5 : 1 in Cyprus, Ireland and Slovakia. The projected deterioration of these dependency ratios is also very varied, shrinking to around 1.5 : 1 in Greece, Poland and Latvia by 2060, although in even the best-placed EU countries (Ireland, France and the UK) the ratio will fall to 2.3 : 1.

Where pension systems have evolved to bring in increased private provision – through what is known as the ‘second pillar’ of employer-funded pensions or the ‘third pillar’ of individual savings plans – the public policy challenge is different. In many EU countries, favourable tax treatment has been used to

induce today’s workers to shift their pension provision in this way, with the aim of reducing the future burden on the state. While potentially good for public finances, a shift to private pension funding does not alter the hard fact that the share of national income going to pensioners can be just as high if it arises from private as from public provision.

There are some immediate policy prescriptions. Maximising the employment rate of the working age population will always be helpful. Although the projections of the crude dependency ratios are inexorable, it is the number of people in work and their productivity which will determine the resources available. If working age people are either unemployed or economically inactive, they also have to be supported by those in work. It would therefore be better to measure the ‘carrying capacity’ of European welfare states by the ratio of those in work to those dependent. In this respect, early retirement schemes are plainly counter-productive because they increase the number of retirees and have been shown to have little value in providing jobs for younger workers. The belief that a job relinquished by an older worker makes one available for a younger one is an illustration of what economists call the ‘lump of labour fallacy’, the misguided notion that the number of jobs in the economy is fixed.

There is, however, an equity argument about early retirement because of the uneven working life pattern of different social groups and the nature of different occupations. Having the same retirement age for a manual worker starting at age sixteen and a graduate with a second degree who may only be starting work several years later could be considered unfair. If, in addition, the former’s work is physically demanding, the case for receiving a pension earlier will be stronger still. An obvious compromise is to make the criterion for pension eligibility years worked rather than employing a fixed retirement age. Adjustments could be made for time spent out of the workforce, for example for child-rearing, or for highly physical work.

What can be done?

The menu of solutions consists of three main orthodox options and two more contentious ones. The first, which many EU countries have already adopted, is raising the retirement age. The straightforward reason-

ning is to yield more years of contributions and fewer years of payment of pensions, thereby altering the ratio of working population to dependent population. Complications arise in the transition, especially if a segment of the current working population has to pay twice (or believes it must do so) because of the need to pay for current pensions while also postponing its own. A gender dimension may arise if women, who in many systems have traditionally had lower retirement ages, are asked to move to the higher male retirement age. It is important to note, however, that raising the retirement age does not necessarily alter the non-pension related costs of ageing, notably for health and social care.

Second, the costs of ageing could be met by taxing the working population more heavily. The obvious drawback of this response is the apparent unfairness of the increased burden it would impose on the current working population. The latter already face the higher bill to pay for the previous generation, but may also have to pay more to provide for its own future. However, the wider ramifications also need to be taken into account. A higher tax burden could both reduce incentives to work and, depending on the instruments used to raise revenue, diminish international competitiveness by increasing employers' costs.

A third solution is to curb the flow of benefits to the elderly. This can be directly orchestrated through formulae linking public pension entitlements to the strength of the economy, so as to limit the share of pensions in gross national income. Two possible options, among many others, are to index pensions to consumer prices or real wages, or to relate outlays on pensions to the growth of GDP. What such reforms cannot do so easily, though, is to reduce the future care costs of ageing. Unless society is prepared to offer less care to the elderly, there is likely to be a rising cost of coping with chronic age related conditions, such as dementia. Instead, solutions may have to come from taxing the income or, sometimes more plausibly, the wealth of the elderly. Taking this route has proved to be very tricky for political leaders and can also affect younger generations as it reduces inter-generational wealth transfers. The elderly can, however, justifiably claim they contributed during their working lifetimes and are therefore entitled to the benefits.

More controversially...

The two more controversial means of dealing with the costs of ageing have very different features. One is to increase the working population by boosting immigration of younger workers. The second is building up a stock of foreign assets (a sovereign wealth fund – SWF) able to generate a flow of income to be used to meet social policy costs. Intriguingly, both can be viewed as consequences of globalisation and, from this perspective, should be interpreted with subtlety, including in relation to the morality of the solution.

If they achieve a high employment rate, immigrants will typically be net contributors to the public finances, more so if they possess skills which attract higher salaries. Migration, however, also means a brain drain from the countries of origin to the host country, to the extent that the former pay for the education of the migrant. At the same time, migrants often remit income to their home countries and can enhance their 'human capital' while working in another country, sometimes returning to the country of origin and boosting the stock of human capital. Ireland, long a country of emigration, became a magnet for returning émigrés during its boom years. Over the long term, immigrants and their families will – self-evidently – also age and expect to receive the same benefits as the indigenous population. But in the medium-term, the direct fiscal effects should be positive, so long as immigrants are integrated into the host country labour market.

Some SWFs can be enormous: for example, the main Norwegian Fund – much of it invested abroad – is valued at close to three times the country's GDP and the return it generates, after deducting administrative and other costs, is around 4%. This means an annual flow of around 12% of GDP, equivalent to around half of Norway's entire social protection budget. The SWF pathway has mixed effects as well, mirroring the analysis of migration. The return on investment flowing from the countries where the fund invests to the country of origin means lower income in the former and higher income in the latter. However, by raising the rate of investment in the host country, the SWF will have contributed to its economic development, with gains for both sides. Wealth funds are usually outside direct democratic control, raising

questions about their legitimacy. However, if it is a path countries choose to follow, they can adopt regulations for the fund enshrining national preferences, be it on the ethics of its investment decisions, as Norway currently does, or of how revenues are used.

Other policy considerations

Even if solutions can be found to the public sector costs of ageing, while achieving both intra- and inter-generational fairness, there are several structural economic challenges to be confronted because of demographic change. The first concerns labour supply. Older people tend to consume a higher volume of care services, requiring a sizeable increase in the jobs which provide such services. In EU countries, these jobs tend to be poorly paid and, to the extent that they are funded predominantly by public money, will continue to be subject to cash constraints. This is not a conjunction likely to attract the increased number of care workers certain to be needed. In many EU countries, the existing labour force disproportionately consists of older female workers who will exit the labour market relatively soon. Coping with care demands will therefore become doubly difficult because of the need to replace the existing workforce as well as meeting new demand.

Second, the overall mix of public expenditure matters. Action to improve the long-run sustainability of fiscal policy can free resources to cover the costs of ageing, following much the same logic as for an SWF. Interest payments on public debt can be a large component of government outlays, determined by the volume of the debt and the average interest rate charged. According to Eurostat data, 2017 interest payments on public debt (as a proportion of GDP) ranged from almost zero in Estonia and 0.35% of GDP in Sweden to close to 4% in Portugal and Italy, with Spain (at 2.5%) and the UK (2.7%) among those where a pronounced increase followed the crisis years. A lower debt service burden is attractive, but has implications for burden-sharing because it means the present generation has to pay even more tax to help run down public debt. What also matters is the way this is pursued: governments often find it easier to cut public investment than current spending, detracting from the potential growth of the economy. In practice, too, debt reduction

requires governments to adopt and (often more important) respect suitable fiscal rules. For example, Sweden had a target of running a public surplus of 2% of GDP which meant more rapid debt reduction, although it has since made the target less demanding.

Housing is a third structural challenge. Ageing can be expected to increase the number of households, especially of single pensioners, requiring additional housing tailored to their needs, possibly including location choices different from those of the working population. If new retirement communities become the answer, they will have to be complemented by housing for the army of care workers and the provision of infrastructure such as health-care facilities. Land-use planning will, therefore, have to adapt.

Fourth, there will be awkward questions around wealth and how it is taxed. In many EU countries, pensioner poverty has been replaced by pensioner prosperity, despite the persistence of poverty among certain groups of the elderly. Wealth taxes, including those payable on death, are an emotive subject, but they are one means of lowering the tax demands on the working population. However, as the share of the elderly in the voting population grows, their political voice may be used to oppose such taxes, especially as they tend to have a higher propensity to vote than the young.

Then there is the impact on economic growth. There are two plausible reasons for the trend growth rate to fall because of ageing: first, an older workforce is likely to have a lower propensity to innovate and take risks; and second, older consumers are less attracted to innovative products and services, coupled with a tendency to demand low productivity services. Growth could also be undermined if investment in public goods is crowded-out because of demands for current spending to cope with ageing.

Conclusions

Europe's demographic challenges are formidable and will test the ability of political systems to respond effectively. Increased funding will be needed to provide for the health and social care of a substantially larger elderly population, as well as to ensure pension systems are sustainable. These demands will test the 'carrying capacity' of all European welfare states, as the ratio of the working-age population to elderly dependents falls. However, there are pronounced differences between countries in both the timing of the effects of ageing and the extent of it.

Nevertheless, credible solutions are available and well-understood. What they need is a grand bargain between different strata of society, alongside the political courage to

act decisively to implement it. The required transformations will be shaped both by the social traditions of each country and by actions already taken or reforms in the pipeline. It follows that neither a one-size-fits-all formula, nor a check-list of best practices will be appropriate. Equally, exchange of experience and experimentation with mechanisms found to have been effective elsewhere could be helpful.

Many policy dilemmas nevertheless have to be confronted. Bringing in migrants may ease the fiscal burden, but can lead to pressure on certain public services and has often inflamed the social tensions behind populism. Over-burdening the current working-age group through higher taxation may result in reduced motivation to work, further shrinking the tax base. Curbing benefits may ease the burden on public finances, but undermines the implicit contract between the state and those who have contributed during their working life-times. In short, dealing with the costs of ageing requires difficult moral and distributive trade-offs to be resolved, none of which offer easy choices.

In the end, dealing with ageing is neither a problem of affordability nor of the inability of the welfare system to adapt. It is, above all, a matter of mobilising the required coalitions and having the political will to introduce optimal reform measures.






Telefónica

Elige todo

Cuando eliges
vivir en colores,
tu mundo
crece_

Innovamos para ofrecerte un mundo de posibilidades infinitas, para que puedas conectar con lo que te importa sin renunciar a nada.

Descubre más entrando en eligetodo.com

 movistar |  O₂ |  vivo | SON MARCAS DE TELEFÓNICA


T 200
AÑOS