The UN has released its updated demographic forecasts... …and they highlight the weaker demographic backdrop… …with the world’s population now assumed to start shrinking later this century

The world’s population outlook is a key driver of future economic growth and business outcomes as we explained in Global Demographics, 19 February 2021. A sharp rise in the number of workers can change labour market dynamics, an increase in the number of pensioners can affect fiscal balances and more consumers and workers can increase demand and growth potential.

The UN’s demographic forecasts provide the basis for much global demographic analysis, and the latest set of projections, from the World Population Prospects 2022 report, as usual, show how the world’s demographics are expected to evolve over the rest of this century but also provide the first glimpse of what has changed since the onset of the pandemic as the last release was in 2019.

The most notable shift in the UN’s base case is to now expect the world’s population to peak in the 2080s – whereas three years ago there was no peak within this century. Our own modelling suggests an outcome closer to the UN’s low fertility assumption may be more likely than the central case, with the world’s population peaking in the 2050s.

But beyond that, there are many other interesting takeaways – some economies have seen their future population expectations revised down heavily in the near term, partly due to the pandemic or more recent census data. Others have seen birth rates plummet in recent years, leading to a rethink of where trend fertility is more likely to be and others have seen changing assumptions regarding migration flows. In Korea, the population may drop by 60% over a generation if this level of births is maintained.

In these new projections, India looks set to overtake mainland China as the most populous nation in 2023, as the latter’s population starts to decline in the same year. Africa’s population is set to nearly double between 2022 and 2050, which comes with its own challenges. Ageing remains the biggest societal transformation of the 21st century: Japan is on track to have over 31% of its population aged over 65 years old in 2030.

Demographic data remain as important as ever. Even amid extraordinary uncertainty regarding the near-term outlook and the various gyrations in the economic data, the underlying movements in the world’s population still matter enormously to the global economic outlook.

This is our latest report on the Demographics theme. If you want to subscribe to any of our nine big themes, click here.
New demographic projections

- The UN’s new demographic forecasts suggest a slower pace of global population growth...
- …and the number of people on earth set to peak in the 2080s...
- …but it could easily be sooner, with lower fertility scenarios suggesting the peak may come 30 years earlier

New numbers

The UN’s population forecasts are held up as the gold standard for international demographic projections – providing a wide range of forecasts across all demographic inputs and outputs out to 2100. The updated projections are the first release since the pandemic (with the previous edition being released in 2019) and show a number of updated forecasts for the world’s population that are worth noting.

The world’s total population is expected to peak at 10.43bn in 2086, the prior forecast had the world’s population not peaking before 2100, at 10.87bn then. The downgrade to the longer-term forecast for the world’s population is evident in chart 1, but for the next 30 years the population projections are little-changed.

1. The world’s population is expected to start shrinking in the 2080s, according to the UN

![Chart showing population trends from 2000 to 2100](image)

Source: UN Population Division

This masks a wide divergence across the world, firstly between the near-term outlook and the longer-term outlook. By 2050, where the global projection is relatively unchanged, the outlook for individual economies is quite different. Chart 1 shows the changes made between the 2019 release and this one for the population in key economies in 2050. The difference is largely as a result of near-term changes based on updated census’ meaning a different starting point,
greater migration flows (be it more or less immigration or emigration, including the impact of the war in Ukraine, which the UN acknowledged in its forecasts) and some small impacts from changes in fertility rate assumptions. The global impact may be small, but there have been some substantial revisions to the projected population size by the time we get to 2050.

2. There’s a wide range of amendments to 2050 forecasts

By the time we get to 2100, the updates to forecasts are much more focused on changes to assumptions surrounding birth rates and death rates – and as a result the world’s population estimates have been mostly lowered – with a few exceptions. In the case of the UAE, this is due to higher assumed migration flows, but elsewhere the assumptions are pulled substantially lower – notably in Hong Kong SAR where very low fertility rates look set to pull the population lower through this century without enough migration expected to offset it – the total fertility rate is estimated to be just 0.75 in 2022, nearly half of the previous expectation. Although the UN expects this to move back above 1.0 in the coming years, this very low fertility rate looks set to drive a sharp fall in the population.

3. Some economies have seen population estimates revised up…

4. …while others have seen them fall sharply

Across the world, these lower fertility rates can clearly be seen in revisions to forecasts for 2100, in chart 5.
5. By 2100, most economies will see smaller populations than previously estimated

This is mostly because of updates to the UN’s fertility rate assumptions. The UN has responded to the continued undershoot of global birth rates since 2019 by adjusting its own fertility rate assumptions lower – as can be seen in chart 6.

6. Birth rate assumptions have been revised lower

We’ve argued for some time that these forecasts had been a little optimistic in terms of the direction of travel for birth rates – and that fertility rates would move lower at a faster pace than the UN had previously suggested. Despite lower assumptions than previously, the UN’s forecasts still assume that in many developed economies – such as the UK and Japan – birth rates pick back up steadily in the coming years, reversing a multi-decade trend of lower birth rates. As we argued in Population and the pandemic: The demographic impact of COVID-19, 6 January 2021, these assumptions on fertility rates can dramatically alter longer-term demographic forecasts and the pandemic has likely made many of the reasons for lower birth rates become more entrenched, such as social changes in attitudes towards raising large families and the costs associated with doing so.

In the emerging world, the model assumes that the trajectory in terms of lower fertility rates flattens out greatly in the years to come. We are cautious of this view because of the path followed by Korea, which had a fertility rate above 6.0 back in the 1970s, only for the rapid fall in the birth rate to take this figure well below 2.0 a few decades later. In 2022, Korea’s fertility rate is expected to be 0.87, implying that the Korean population would drop by 60% over a generation if that was maintained without any immigration. With continued improvements in income levels and access to healthcare, we believe that such a scenario is more likely in most other emerging markets in the coming years than the current base case UN forecasts assume.
7. The UN’s model still assumes a grind higher in some fertility rates…

8. …and a slowing of the trend in others

And so we need to pay attention to wild differences between the scenarios for the world’s population over the rest of this century – with the base case being for the world’s population to peak in 2086 at 10.43bn, whilst under a low fertility model, the world’s population would peak at just 8.94bn, just 13% higher than today, in 2053. Our own bias is towards this latter projection, with fertility rates likely to remain low in the coming years. The UN reported that “in high-income countries, successive waves of the pandemic have generated short-term fluctuations in numbers of pregnancies and births”, making near-term data on fertility rates very hard to estimate. In the emerging world, birth rates appear to have seen little impact from the pandemic, but migration rates have been more affected due to border closures.

9. Fertility rate assumptions are key to the overall demographic picture

The full note contains a further look at the individual country and economy data, looking at the different projections across the world, including why the difference in forecasts depending on which fertility estimates are used, as well as our key observations of the UN data.
Summary

Large parts of the world are going through substantial demographic changes. The world’s total population is expected to peak at 10.43bn in 2086 (the prior forecast had the world’s population not peaking before 2100, at 10.87bn).

We’ve argued for some time that these forecasts had been a little optimistic in terms of the direction of travel for birth rates – and that fertility rates would move lower at a faster pace than the UN had previously suggested. If this continues, this peak in population might even come sooner than 2086.

The epicentre of population growth should shift to Africa in the next decades. Indeed, Africa’s population is expected to nearly double between 2022 and 2050. In Asia, in 2023, India will overtake China as the most populous nation. Europe’s population has already started to decline.

This stark divide between those economies with shrinking populations in Europe (notably Italy and Germany) and Asia (Korea and Thailand) and their neighbours will go a long way to explaining expected differences in potential economic growth.

Meanwhile, ageing is the other big social transformation of the 21st century. By 2050 – for the first time in history – there will be more people over the age of 65 than under the age of 15.

10. The developed world is already seeing its population shrink...

11. …and the trajectory may be too optimistic, with fertility rates very low already

12. EM populations keep rising...

13. …but at a slower pace, due to fewer births
Disclosure appendix

The following analyst(s), who is(are) primarily responsible for this document, certifies(y) that the opinion(s), views or forecasts expressed herein accurately reflect their personal view(s) and that no part of their compensation was, is or will be directly or indirectly related to the specific recommendation(s) or views contained in this research report: James Pomeroy, Herald van der Linde, CFA and Prerna Garg

This document has been issued by the Research Department of HSBC.

HSBC and its affiliates will from time to time sell to and buy from customers the securities/instruments, both equity and debt (including derivatives) of companies covered in HSBC Research on a principal or agency basis or act as a market maker or liquidity provider in the securities/instruments mentioned in this report.

Analysts, economists, and strategists are paid in part by reference to the profitability of HSBC which includes investment banking, sales & trading, and principal trading revenues.

Whether, or in what time frame, an update of this analysis will be published is not determined in advance.

For disclosures in respect of any company mentioned in this report, please see the most recently published report on that company available at www.hsbcnet.com/research.

Additional disclosures

1 This report is dated as at 12 July 2022.
2 All market data included in this report are dated as at close 11 July 2022, unless a different date and/or a specific time of day is indicated in the report.
3 HSBC has procedures in place to identify and manage any potential conflicts of interest that arise in connection with its Research business. HSBC's analysts and its other staff who are involved in the preparation and dissemination of Research operate and have a management reporting line independent of HSBC's Investment Banking business. Information Barrier procedures are in place between the Investment Banking, Principal Trading, and Research businesses to ensure that any confidential and/or price sensitive information is handled in an appropriate manner.
4 You are not permitted to use, for reference, any data in this document for the purpose of (i) determining the interest payable, or other sums due, under loan agreements or under other financial contracts or instruments, (ii) determining the price at which a financial instrument may be bought or sold or traded or redeemed, or the value of a financial instrument, and/or (iii) measuring the performance of a financial instrument or of an investment fund.
Disclaimer

This document has been issued by HSBC Bank plc, which has based this document on information obtained from sources it believes to be reliable but which it has not independently verified. Neither HSBC Bank plc nor any member of its group companies (“HSBC”) make any guarantee, representation or warranty nor accept any responsibility or liability as to the accuracy or completeness of this document and is not responsible for errors of transmission of factual or analytical data, nor is HSBC liable for damages arising out of any person’s reliance on this information. The information and opinions contained within the report are based upon publicly available information at the time of publication, represent the present judgment of HSBC and are subject to change without notice.

This document is not and should not be construed as an offer to sell or solicitation of an offer to purchase or subscribe for any investment or other investment products mentioned in it and/or to participate in any trading strategy. It does not constitute a prospectus or other offering document. Information in this document is general and should not be construed as personal advice, given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on it, consider the appropriateness of the information, having regard to their objectives, financial situation and needs. If necessary, seek professional investment and tax advice.

The decision and responsibility on whether or not to purchase, subscribe or sell (as applicable) must be taken by the investor. In no event will any member of the HSBC group be liable to the recipient for any direct or indirect or any other damages of any kind arising from or in connection with reliance on any information and materials herein.

Past performance is not necessarily a guide to future performance. The value of any investment or income may go down as well as up and you may not get back the full amount invested. Where an investment is denominated in a currency other than the local currency of the recipient of the research report, changes in the exchange rates may have an adverse effect on the value, price or income of that investment. In case of investments for which there is no recognised market it may be difficult for investors to sell their investments or to obtain reliable information about its value or the extent of the risk to which it is exposed. Some of the statements contained in this document may be considered forward looking statements which provide current expectations or forecasts of future events. Such forward looking statements are not guarantees of future performance or events and involve risks and uncertainties. Actual results may differ materially from those described in such forward looking statements as a result of various factors.

This document is for information purposes only and may not be redistributed or passed on, directly or indirectly, to any other person, in whole or in part, for any purpose. The distribution of this document in other jurisdictions may be restricted by law, and persons into whose possession this document comes should inform themselves about, and observe, any such restrictions. By accepting this report, you agree to be bound by the foregoing instructions. If this report is received by a customer of an affiliate of HSBC, its provision to the recipient is subject to the terms of business in place between the recipient and such affiliate. The document is intended to be distributed in its entirety. Unless governing law permits otherwise, you must contact a HSBC Group member in your home jurisdiction if you wish to use HSBC Group services in effecting a transaction in any investment mentioned in this document.

Certain investment products mentioned in this document may not be eligible for sale in some states or countries, and they may not be suitable for all types of investors. Investors should consult with their HSBC representative regarding the suitability of the investment products mentioned in this document. HSBC and/or its officers, directors and employees may have positions in any securities in companies mentioned in this document. HSBC may act as market maker or may have assumed an underwriting commitment in the securities of companies discussed in this document (or in related investments), may sell or buy securities and may also perform or seek to perform investment banking or underwriting services for or relating to those companies and may also be represented on the supervisory board or any other committee of those companies.

From time to time research analysts conduct site visits of covered issuers. HSBC policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

HSBC Bank plc is registered in England No. 14259, is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority and is a member of the London Stock Exchange. (079805)

© Copyright 2022, HSBC Bank plc, ALL RIGHTS RESERVED. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, on any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of insert issuing entity name. MCI (P) 037/01/2022. MCI (P) 017/10/2021

[1196052]