

Demographics – looking into the future

Jonathan Ashworth
12 August 2022

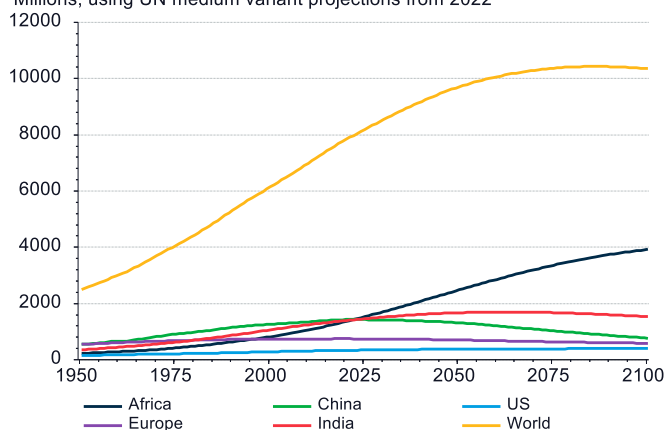


Major demographic changes can have profound impacts on geopolitics, the global economy, national economies, and financial markets. Below we highlight some of the key demographic shifts expected over coming decades and discuss some of the likely macroeconomic impacts.

The global population will continue to soar and peak at around 10.5 billion later this century according to the UN's latest forecast. This suggests that we will see dramatic changes in the composition of the global population. China is expected to lose its crown as the world's most populous country to India, with the Middle Kingdom's population forecast to almost halve by 2100. The population of Europe is also expected to fall from almost 750 million to under 600 million by 2100,¹ whereas the population of the US is expected to continue to rise from less than 340 million to almost 400 million. The rapid growth in the global population will be primarily driven by Africa, whose population is forecast to almost triple by 2100.

Total populations

Millions, using UN medium variant projections from 2022



Source: Refinitiv Datastream / Fathom Consulting

Particularly important from a macroeconomic perspective, will be the growth in the size of working-age populations,² which determine the size of the labour force. Changes in the latter, and in its productivity, are key determinants of future trend growth. A fast-rising working-age population can boost growth, with the converse true for a declining one. Moreover, large increases in the supply of workers can help keep wage and inflationary pressures contained, with the opposite potentially occurring for a shrinking workforce. A falling or slow-growing working-age population is also likely to result in a sharp rise in the dependency

¹ In the UN definitions Europe includes Russia and Ukraine.

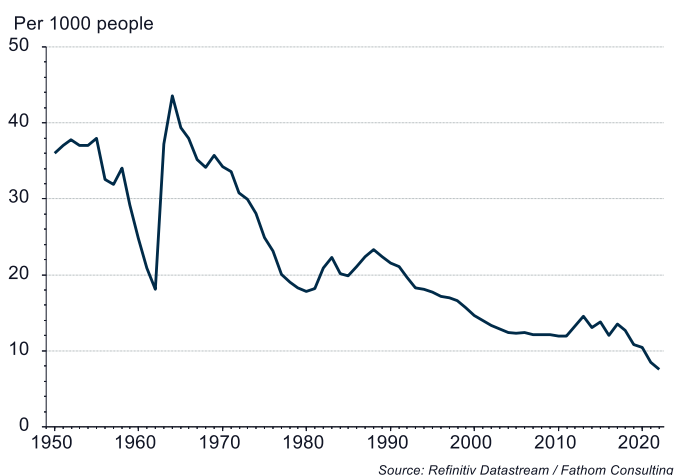
² The working-age population is typically considered to consist of those aged between 15 and 64 years old.



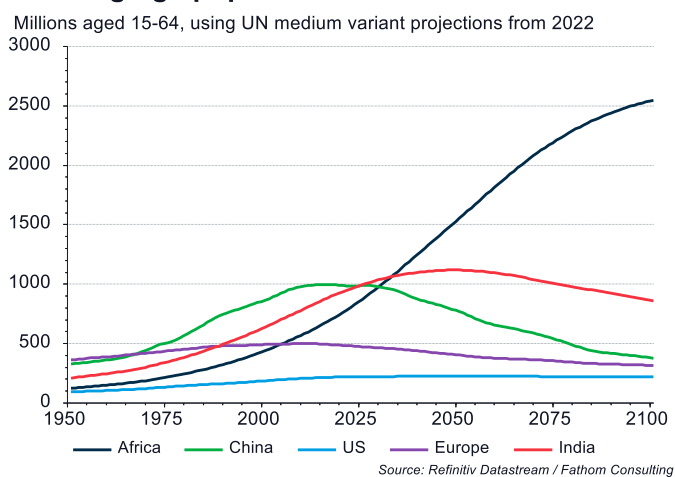
ratio – the proportion of the population aged 0-14 and 65+ divided by the size of the working-age population – straining public finances.

The previous rapid decline in its birth rate, means that China's working-age population has already begun to fall, and this process will accelerate sharply through the 2030s. The working-age population of Europe will continue to decline, while that of the US will be largely unchanged. The ultimate impact on trend growth will depend on whether countries can find offsetting increases in productivity growth. The growth in the global working-age population will largely come from Africa, where it is estimated to increase from around 800 million to 2.5 billion by 2100.

China birth rate



Working-age populations



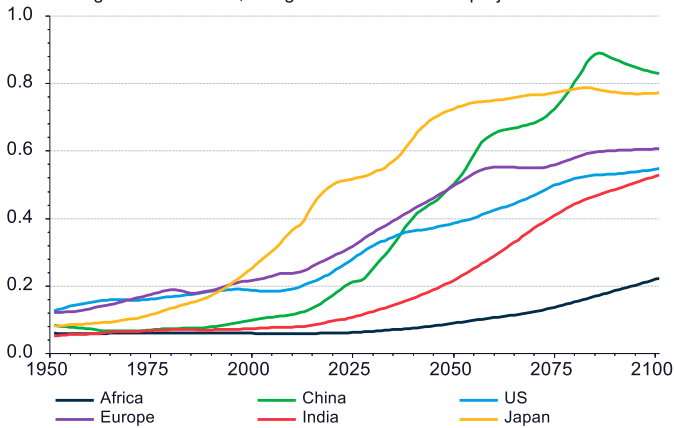
China's entrance into the global economic system following the policy of 'Reform and Opening Up' resulted in a huge increase in the effective global labour supply, helping to push down global inflation. Given the existence of some remaining rural labour and significant levels of underemployment, Fathom does not see China as an immediate source of global inflation. Nevertheless, over time, much could hinge on its ability to substitute capital for labour. The extent to which global production can be moved to the increasingly labour-rich, low-cost African countries is also likely to be important for future global inflation.



A rapidly ageing population in China and across advanced economies is highlighted by the expected increase in old-age dependency ratios. The latter are forecast to increase quite markedly in Europe and the US, but to a lesser extent than in China. China is ageing at much lower levels of income than has historically been the case.

Old-age dependency ratio

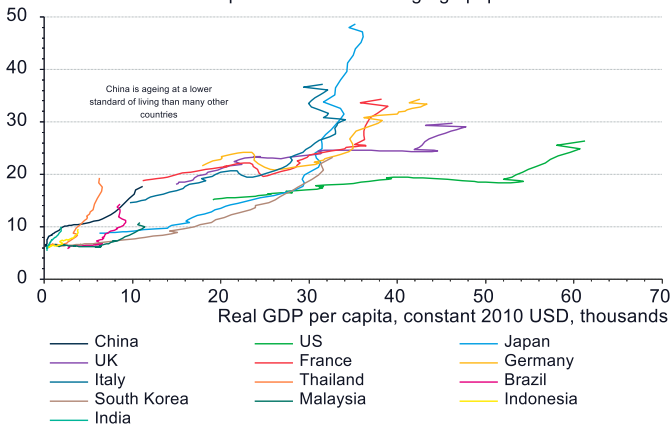
Ratio of aged 65+ to 15-64, using UN medium variant projections from 2022



Source: Refinitiv Datastream / Fathom Consulting

Standard of living and dependency ratio

Those older than 64 as a per cent of the working-age population



Source: Refinitiv Datastream / Fathom Consulting

All in all, the world is expected to experience profound demographic changes. Declining working-age populations will weigh on growth and public finances, with the overall impact depending on the extent of any offsetting boosts from productivity. The impact on global inflation may depend on the ability to substitute capital for labour and/or shift production to labour-rich African countries.



Related reading:

[Down, but not out? China's evolving economy](#)

[Global Outlook, Summer 2022: Between a rock and a hard place](#)



Fathom Consulting
47 Beviden Street
London
N1 6BH
Tel: +44 (0)20 7796 9561



Contact information
jonathan.ashworth@fathom-consulting.com
www.fathom-consulting.com

This newsletter is a confidential, copyright protected communication intended only for the person to whom it was originally sent. If received in error, please notify the sender and delete immediately. Its intended recipients may not make copies of this newsletter, or distribute it to third parties, without the written consent of Fathom Consulting.

Fathom Consulting is a trading name of Fathom Financial Consulting Limited, a company registered in England & Wales under the Companies Act, company number 04942817, © 2022

Regulatory Disclaimer

FFC LIMITED and all of its affiliates (henceforth FFC) do not conduct "investment research" as defined in the FCA Conduct of Business Sourcebook (COBS) section 12 nor do they provide "advice about securities" as defined in the Regulation of Investment Advisors by the U.S. SEC. FFC is not regulated by the SEC or by the FCA or by any other regulatory body.

This research report has not been prepared in accordance with legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research. Nonetheless, FFC has an internal policy that prohibits "front-running" and that is designed to minimize the risk of receiving or misusing confidential or potentially material non-public information.

The views and conclusions expressed here may be changed without notice. FFC, its partners and employees make no representation about the completeness or accuracy of the data, calculations, information or opinions contained in this report. This report may not be copied, redistributed or reproduced in part or whole without FFC's express permission.

Information contained in this report or relied upon in its construction may previously have been disclosed under a consulting agreement with one or more clients. The prices of securities referred to in the report may rise or fall and past performance and forecasts should not be treated as a reliable indicator of future performance or results. This report is not directed to you if FFC is barred from doing business in your jurisdiction. Nor is it an offer or solicitation to buy or sell securities.

Analyst Certification

I Jonathan Ashworth, the lead analyst, certify that the views expressed herein are mine and are clear, fair and not misleading at the time of publication. They have not been influenced by any relationship, either a personal relationship of mine or a relationship of the firm, to any entity described or referred to herein nor to any client of FFC nor has any inducement been received in relation to those views.

I further certify that in the preparation and publication of this report I have at all times followed all relevant FFC compliance protocols including those reasonably seeking to prevent the receipt or misuse of material non-public information.