

Free to View Disruptive Technology - Multi-Asset Global | Thematic research



May 2024

www.research.hsbc.com

### By: HSBC Research Team

# **Artificial Intelligence**

## The good, the bad, and the ugly

Al has the potential to drive significant improvements in productivity and open up new opportunities for businesses...

...but not everyone will benefit equally, and some fear the technology could even pose a threat to humanity

Who to believe? We go through the arguments and evidence about the good, the bad, and the ugly aspects of AI

This is a Free to View version of a report with the same title published on 21-May-24. Please contact your HSBC representative or email <u>AskResearch@hsbc.com</u> for more information.

**Disclosures & Disclaimer:** This report must be read with the disclosures and the analyst certifications in the Disclosure appendix, and with the Disclaimer, which forms part of it.



## **Artificial Intelligence**

### The good, the bad, and the ugly

The AI revolution is upon us. As with the internet in the late 1990s, AI technology has the potential to lead to significant productivity improvements. However, these benefits are unlikely to be evenly distributed. To help investors understand the impact that AI is likely to have on the economy, we look at the good, the bad, and the ugly of AI.

### **Exciting times**

Al has been productively employed in many areas of the economy now for several years, but in the past 18 months, public interest has boomed. In financial markets, the technology has gone from being the specialist subject of a handful of analysts to one of the most widely discussed themes, with announcements on the topic capable of precipitating major market moves.

Why the excitement now? What's changed, of course, is Generative AI. Before the release of ChatGPT in late 2022, most people believed there was something uniquely human about the act of being creative. ChatGPT (and other models since) have clearly shown that AI is also very capable at this skill.

This has been a psychological shock for some. The response has been a significant degree of polarisation. We see lots of hype from those who are excited about this technology and its potential to drive productivity. Others worry about the potential side-effects, such as jobs being displaced. The more pessimistic fear the scope for significant harm or even an existential threat to humanity.

Who to believe? Well, in our view, the most likely outcome is probably somewhat more prosaic than the arguments at either end of the spectrum. Broadly speaking, we see grounds to be optimistic about the wider economic impact of AI, though not all companies, markets and people will benefit equally. But while we are not necessarily convinced by some of the arguments about the perceived threat of AI, we think it is useful for investors to understand them, given that they have the potential to shape opinions towards a technology already driving huge shifts in asset prices.

The full note, available to clients of HSBC Global Research, explores the arguments and evidence about the good, the bad, and the ugly aspects of AI, from aggregate productivity (good), to a look at capital vs labour (bad), to what the nature of "truth" is (the ugly) – and so much more.



### The good

- Aggregate productivity. Generative AI technology has the potential to lead to broad productivity increases across the entire economy, with estimates implying an annual boost in the range of 0.1-1.0%. If realised, this would be a significant tailwind for equity markets. However, past examples of similar technological development suggest this boost may be more elusive than many currently expect. We look to history to see what can be learned from similar technological leaps.
- Broad benefits. We look at the wide range of sectors including design, pharmaceuticals, financial services, hospitality and logistics – that are already employing AI to increase efficiency and improve services for customers.
- Winners vs losers. Within sectors, companies that use AI more effectively are likely to outperform those who do not. Identifying the best-placed competitors could allow active investors to more effectively invest in the AI theme. We discuss which metrics investors should be watching.
- Timelines. How quickly could the potential benefits become clear? Since markets are constantly trying to price in future expectations, changes in the consensus opinion will lead to sharp price movements. Investors should consider carefully their own view on this, so they can take advantage of any perceived mispricing.

# 0.1-1.0%

Potential increase estimates in labour productivity from AI by McKinsey and PwC

#### The bad

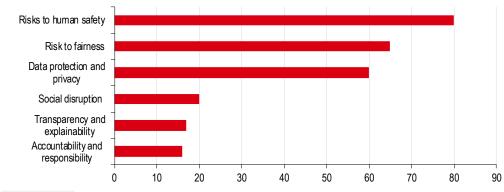
- Capital vs labour. An increasing number of roles are at risk of being replaced by AI-powered automation. Even if AI doesn't lead to a significant loss of jobs, it is likely to lead to a shift in the share of profits between capital and labour. Investors could consider the impact on the sectors they cover.
- Some cautionary tales: While it's easy to see the opportunities of how AI could be transformational to the global economy, it's important to keep in mind the historical examples of similar technological breakthroughs that looked to have a similarly transformational impact at the time, only to be false dawns. We look at the potential parallels.
- Competition. The potential benefits from AI may appear so appealing that companies are prepared to over-compete for them. For example, training large language models is costly, but how far they can be directly monetised is debatable. Investors should consider whether competition will push the price of AI services so low that *consumers* end up being the beneficiary rather than the companies most directly exposed to the AI theme.

**15%** Of tasks could be impacted by AI, based on estimate from OpenAI



### The ugly

- The nature of truth. Over several generations, humans have developed many heuristics which have, thus far, served us well. Most notably, we say that 'seeing is believing'. Well, not any more thanks to Generative AI. This has significant implications for cyber security, fraud, and political harmony.
- Greater energy use. The greater use of power-hungry AI tools means a faster growth in electricity demand, meaning technological breakthroughs in power supply may be needed to keep up with greater use of AI.
- Distributional impacts, including on EM. While developed markets (DM) have a greater share of the jobs that are more likely to be affected by AI in the short term, emerging markets (EM) could face greater disruption in the long term if tasks that are currently being outsourced to EM can be made more efficient by AI. This would likely reduce the demand for jobs to be offshored, and have a significant influence on the pace of development in many EM markets.



#### Top challenges addressed in emerging AI-related regulation

Source: OECD.AI, HSBC

It is still relatively early days for AI. Its impact in the areas above and others besides will become clear in time. But there are already more than enough potential consequences for economists, businesses, regulators – and of course investors – to weigh up.

To find out more about HSBC Global Research and how to subscribe, please email us at askresearch@hsbc.com



# **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 and Mark McDonald

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 <u>www.hsbcnet.com/research</u>.

### Additional disclosures

- 1 This report is dated as at 21 May 2024.
- 2 All market data included in this report are dated as at close 17 May 2024, 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**

Issuer of report HSBC Bank plc

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. (070905)

© Copyright 2024, 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) 061/09/2023, MCI (P) 073/10/2023, MCI (P) 007/10/2023, MCI (P) 008/01/2024

[1236758]