

Pathways to Global Job Creation

Briefing Paper in Preparation for the Global Future Council on the Future of Job Creation

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Labour markets globally are impacted by a period of industry transformation driven by increased adoption of technology, the green transition and value chain restructuring and this is compounded by the current challenging global macro-economic conditions. In light of this, the World Economic Forum is launching a [Global Future Council on the Future of Job Creation](#) to explore how investments and incentives can prioritize local and global job creation. After briefly reflecting on the global state of employment, this briefing paper lays out key investment pathways to job creation in preparation for the council's work.

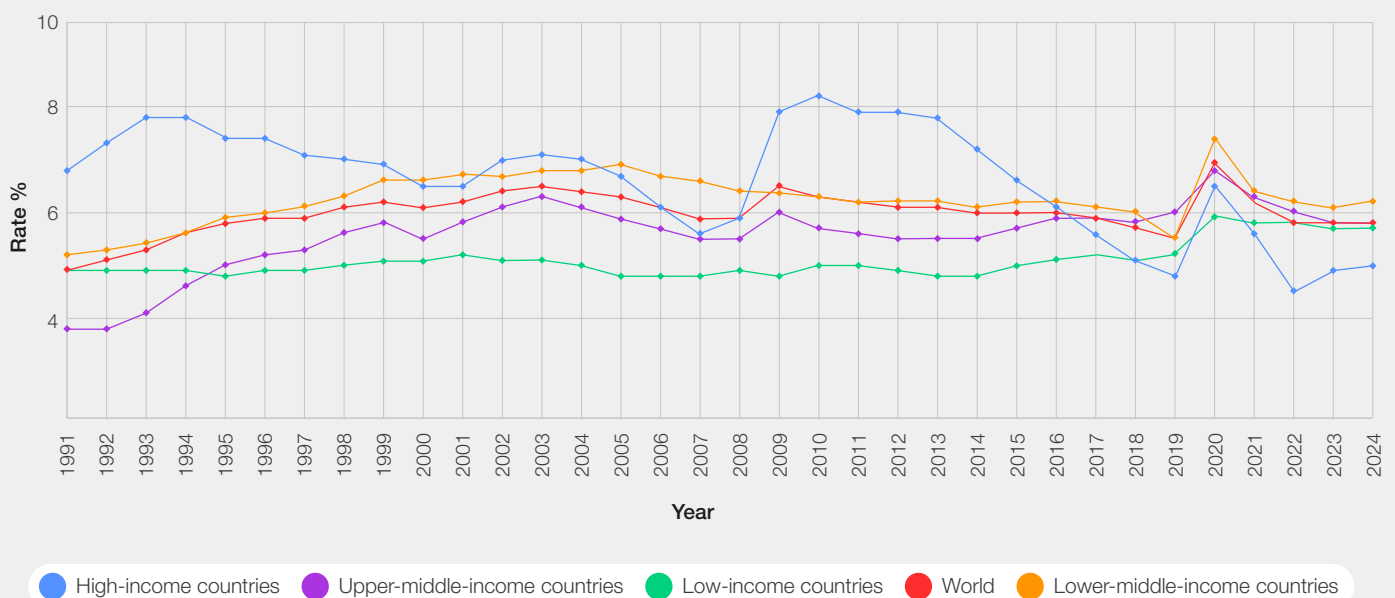
Global employment trends and the need for job creation

The health, economic and geopolitical crises of the past three years have significantly impacted economies and labour markets worldwide, and global unemployment is projected to rise slightly as the economy slows down. The International Labour Organization (ILO) expects global unemployment to [grow by 3 million to 208 million](#) in the course of 2023. Still, employment outcomes between countries and workers are highly divergent.

As of late 2022, Organisation for Economic Co-operation and Development (OECD) countries have an average unemployment rate of [4.9%](#) – the lowest in decades. This leads to labour shortages in these countries and may be compounded further by declining working-age populations. On the other hand, unemployment rates for low- and lower-middle-income countries are still above [pre-pandemic levels](#), with lower-middle-income countries experiencing the most unemployment (see graph below). Demographic shifts will further impact the employment levels in these countries. In Africa, where unemployment is highest, the population is projected to grow by 450 million by 2035, but analysis shows there may only be around [100 million new jobs](#) in this time frame if current trends continue. Effective investment in job creation is needed to bridge the gap between the demand and supply of talent.

While there has been a divergence in employment outcomes between countries, there has also been a divergence among workers within countries. Women experienced [greater employment loss](#) than men during the pandemic, and according to the World Economic Forum's [Global Gender Gap Report 2022](#), gender parity in the labour force stands at 62.9% – the lowest level registered since the index was first compiled.

FIGURE 1 Rate of unemployment (%), multiple locations



Source: ILO, "World Employment and Social Outlook", n.d.

Young people have struggled with unemployment since the onset of the pandemic. According to the ILO, the share of 15-24-year-olds not in employment, education or training [rose to 23.3%](#) post-pandemic, or over one in five.

These employment trends play out against a backdrop of global industry transformation. Technological advancement, the green transition and value chain restructuring are changing industries and impacting jobs and skills. The Forum's [Future of Jobs](#) report finds that 23% of jobs are expected to change by 2027, with 69 million new jobs created and 83 million eliminated. The green transition and localization of supply chains will lead to net job growth, while adoption of technology and increased digital access will also create net job growth but with greater offsets from losses. Slower economic growth, supply shortages and inflation pose the greatest risks to jobs. The jobs that are expected to be fastest-growing are AI and machine learning specialists, sustainability specialists, business intelligence analysts and information security specialists. The largest absolute growth is expected in jobs in education, agriculture and digital commerce. At the same time, the fastest declining roles are expected to be clerical or secretarial roles including bank tellers, cashiers and data entry clerks. These trends highlight the importance of enabling the workforce to adapt to changing demands.

Efforts to drive job creation need to ensure that jobs are high-quality and high-wage jobs. Globally, [214 million workers](#) are in working poverty, and [over 60%](#) of workers are in the informal economy, with the majority lacking any form of social protection. Therefore, new jobs must be good jobs that provide fair pay, protection and ensure health and wellbeing.

Addressing the need for more and better jobs will enable businesses to grow and countries to thrive. The World Economic Forum's Global Future Council on the Future of Job Creation seeks to support global leaders in their efforts by illuminating the key investment pathways towards job creation.

Pathways for investments in job creation

In preparation for the work of the council, this briefing paper lays out four key pathways for investments in job creation: investing in strategic industries with the highest potential for job creation, investing in research and development, investing in small- and medium-sized enterprises (SMEs), and investing in trade growth.

These pathways should encompass other direct and complementary job creation activities, such as implementing fiscal incentives or supporting non-standard forms of employment, and all investment activity should consider the wider impact on economies and labour markets.

A prerequisite for effective job creation is investing in human capital to ensure workers are prepared to move into new jobs. This means creating stronger education systems to train workforces with the skills needed for the changing workplace, as well as fostering an entrepreneurial culture to strengthen business. It also means promoting diversity, equity and inclusion efforts to ensure a high level of overall workforce participation. Considering these prerequisites, this section describes the mechanisms through which the four key pathways for investments lead to job creation and illustrates academic research and policy implementation.

Investing in strategic industries with the highest potential for job creation

Industries with a high potential for job creation are industries in which investments lead to a high rate of direct and indirect job creation. Direct job creation is driven by the creation of new businesses and the growth of existing businesses. Indirect jobs can be created through backward linkages (such as creating demand in sectors that provide raw materials for the industry's products) and forward linkages (such as creating demand in the sectors where workers spend their wages). An industry's potential for job creation will differ by country depending on the country's economic structure and relative industry competitive advantage.

This section provides examples of investments in industries that have led to, or have the potential to lead to, high job creation in particular countries:



Energy and materials in the US and China

Tackling climate change by transitioning to a low-carbon future is an important goal for all economies, and boosting domestic capabilities in renewable energy can lead to job growth and improved environmental outcomes. China provides [42%](#) of renewable energy jobs globally and has secured a leading role largely due to investments in offshore installations, production of critical materials such as polysilicon and dedicated industrial parks. The US is also simultaneously improving environmental outcomes and creating jobs through the Inflation Reduction Act, which has supported the creation of [100,000 clean energy jobs](#) since its inception in August 2022. With increased front-loaded investments in renewable energy, the sector could grow [three-fold by 2030](#), from 12.7 million to 38.2 million jobs globally.



Information technology and digital communications in Europe

The Forum's [Future of Jobs](#) report demonstrates that technology and digitization are key drivers of direct job growth worldwide but are also powerful contributors to growth in other sectors. One [study among European countries](#) found empirical evidence suggesting that growth in Europe's tech employment has indirect effects on growth in other sectors. By using a standard economic growth model with employment multipliers, the authors estimate that each additional tech job leads to the generation of around five additional jobs in other sectors in Europe.



Care, personal services and well-being globally

The [ILO estimates](#) that investing in care could create up to 299 million jobs globally by 2035 – 96 million direct jobs in childcare, 136 million direct jobs in long-term care, and 67 million indirect jobs in non-care sectors. These transformative investments would reap crucial economic and social benefits: of the total net employment creation in 2035, 78% of these new jobs are predicted to be held by women, and 84% are predicted to be formal employment.

Investing in research and development

Public research and development (R&D) funding is one of the key investments that can generate many high-quality jobs. R&D leads to the creation of new products and industries, growing the employment base and boosting international and domestic competitiveness. In OECD economies, [five new jobs are created](#) for every one million dollars invested in public R&D, and it is twice that number when the investment is channelled through higher education institutions. By acting as [entrepreneurial states](#), governments can enhance the impact of R&D investments.

The following examples identify the impact that previous R&D support projects have had on job creation:



Pharmaceuticals in India

The [origins](#) of the Indian pharmaceutical industry centre on the Indian Patent Act of 1970, which weakened intellectual property protections for products and process patents. This, paired with import restrictions, price controls and an influx of public investment for constructing pharmaceutical, chemical and biotechnology manufacturing facilities, transformed a nascent industry into a global production leader. By 2013, Indian pharma produced an estimated [10% of global supply](#), providing 29 million jobs.



Peanut agro-industrial sector in Argentina

Argentina is the largest supplier of peanuts to the EU, with most activity taking place in the province of Córdoba. The development of the peanut agro-industrial sector in Argentina was accelerated due to R&D financed by the National Innovation Agency, public-private partnerships to address fungal threats to crop yields and national productive policies, among other interventions. Today, the sector sustains the economies of 30 towns in Córdoba, providing around [12,000](#) direct and indirect jobs.



Knowledge economy in the European Union

The [European Union's Horizon 2020](#) (H2020) programme aimed to drive economic growth in Europe by funding R&D projects. This included projects such as attracting young people to start a career in scientific research, fostering the creation of innovative and sustainable products and accelerating entrepreneurial learning. A [study](#) from the European Parliament found that H2020 directly created 53,000 research jobs and is estimated to create 2.3 million jobs overall between 2014 and 2030.

Investing in SMEs

[According to the ILO](#), self-employed, micro and small enterprises account for 70% of total employment – two-thirds of which is found in the informal sector. However, SMEs often experience [high financing gaps](#), lack of information and high regulatory burden, causing constraints on growth.

This is particularly the case for informal enterprises. As SMEs are important contributors to job creation and economic development, leaders can boost job creation by supporting the growth and expansion of SMEs.

This section provides examples of investments in SMEs that have led to, or have the potential to lead to, high job creation in particular countries:



Linkage programmes in Guinea

Lack of information about potential suppliers, purchasers, resources or partners can often prevent SMEs from remaining competitive and succeeding. Creating linkages with multinational enterprises can help by supporting SMEs to adopt practices and systems to satisfy the standards required by large corporations. For example, in a remote part of Guinea where formal employment was rare, a new linkages programme [created over 700 jobs](#) and signed \$9.1 million in new contracts between local businesses and international mining companies.



Reduce the regulatory burden on SMEs in Chile

In some countries, starting a formal business can involve [up to 20 procedures](#), take over seven months and cost up to 211% of income per capita. Governments can encourage formal business creation by cutting the red tape. In Chile, the government created [three digital platforms](#) to facilitate business start-up and ongoing compliance formalities, as well as a private corporation – SERCOTEC – dedicated to supporting the development of formal enterprises. In 2017, one of SERCOTEC's programmes assisted 137,540 entrepreneurs in growing their businesses.



The ILO's SCORE Programme in Indonesia

SMEs often lag behind corporations in terms of their resources and compliance capacities. The ILO's [Sustaining Competitive and Responsible Enterprises \(SCORE\) Programme](#) works to improve SMEs' productivity, competitiveness and working conditions by combining classroom training with in-factory consulting. In Indonesia, after participating in SCORE training, 48% of the SMEs reported increased productivity, 21% reported a reduction in labour turnover, 75% reported operational cost savings and over 1,400 full-time and temporary jobs were created during this period.

Investing in trade growth

Trade is an important driver of job creation, as it raises the demand for products and resources used in producing exports. According to a [report](#) by the EU Commission, there has been a 75% growth in export-related jobs in countries in the EU in the last two decades, and these jobs are, on average, 12% better paid than those not directly supported by trade. However, while strengthening international trade links can increase employment gains for some countries in particular sectors, it can also displace jobs if imports undercut the outputs of domestic businesses. In this way, trade activity should prioritize policies and actions that enable job creation.

This section provides examples of investments in trade growth that have led to, or have the potential to lead to, high job creation in particular countries:



Ethiopia

Ethiopia's Investment Proclamation of 2012 led to job creation through the use of export processing zones (EPZs). EPZs are schemes to produce more price-competitive, exportable goods by waiving duties in export processing zones. One such EPZ, Ethiopia's Bole Lemi Industrial Zone, was supported by further government investment in roads and telecommunications infrastructure around the site and resulted in foreign investment from twelve international textile and garment-producing companies, creating around [3,000 jobs](#).



Malaysia

Openness to trade and investment has been key to Malaysia's growth. Traditionally an agriculture and commodity-based economy, Malaysia is now a leading exporter of electrical appliances and parts, with [40% of jobs in Malaysia](#) linked to export activities. This has been facilitated by [Malaysia's investments](#) in coastal ports to provide maritime access to Asia and Europe, as well as investments in air transport infrastructure, industrial zones and trade corridors.



Ireland

In Ireland, [47% of the workforce](#) is involved in producing goods and services that are consumed overseas. This makes trade a key component in job creation in Ireland. The Irish Government created the state agency [Enterprise Ireland](#) to help companies grow and increase their international sales, focusing on growing jobs related to the green transition, crisis response and digitization. Business investments made through Enterprise Ireland led to a [5% increase](#) in jobs within a year of the agency's establishment, most of which were outside of the capital city.

The Global Future Council on the Future of Job Creation

The World Economic Forum is launching a [Global Future Council on the Future of Job Creation](#) to look at how countries and leaders can prioritize, incentivize and invest in job creation worldwide. The council will explore opportunities, challenges and pathways to job creation that governments, businesses, policy-makers, civil society, academia and other stakeholders can leverage.

Global Future Council on the Future of Job Creation

Co-Chairs

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Jian Han

Professor of Management; Founding Academic Director,
Chief Human Resource Management Officer Programme,
China Europe International Business School (CEIBS),
People's Republic of China

Vito Intini

Regional Chief Economist and Inclusive Growth and Sustainable Finance Team Lead, United Nations Development Programme (UNDP), Jordan

Erika Kraemer Mbula

Professor of Economics, University of Johannesburg, South Africa

Sangheon Lee

Director, Employment Policy Department, International Labour Organization (ILO)

Precious Moloji-Motsepe

Co-Founder and Chief Executive Officer, Motsepe Foundation, South Africa

Veronica Nilsson

Acting General Secretary, Trade Union Advisory Committee (TUAC) to the OECD, France

Nela Richardson

Senior Vice-President; Chief Economist, Automatic Data Processing (ADP), USA

Lisa Sachs

Adjunct Associate Professor of International and Public Affairs;
Director, Columbia Center on Sustainable Investment, University of Columbia, USA

Tushar Singhvi

Deputy Chief Executive Officer and Head of Investments,
Crescent Enterprises, United Arab Emirates

Juan Carlos Thomas Soto

Director of Entrepreneurship, Technoserve, Chile

This briefing paper was produced by the World Economic Forum's Centre for the New Economy and Society in preparation for the work of the Global Future Council on the Future of Job Creation (Elselot Hasselaar, Head of Mission Work, Wages and Job Creation, and Steffica Warwick, Specialist Mission Work, Wages and Job Creation).

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