Pathways to Global Job Creation

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

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:

1. **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 threefold by 2030, from 12.7 million to 38.2 million jobs globally.

2. **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.

3. **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.

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 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**

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.

**Reduce the regulatory burden on SMEs in Chile**

To drive economic growth, Chile's government abolished over 200 procedures, took 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, at 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.

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**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](https://www.weforum.org/agenda/2020/01/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**

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