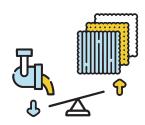


Introduction

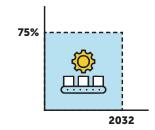
Ukraine's manufacturing sector, once a cornerstone of the economy, is under immense pressure as it navigates wartime disruptions and labor shortages. Heavy industries such as metallurgy, concentrated in the east, have faced sharp production declines, severe workforce losses, and challenges in relocating operations. In contrast, light industries like textiles, which are more geographically dispersed and employ

predominantly women and internally displaced persons (IDPs), have shown greater flexibility and resilience, quickly adapting to wartime demands. This brief examines these key labor dynamics, using metallurgy to represent heavy industry and textiles to represent light industry, highlighting critical gaps and opportunities for workforce investment vital to Ukraine's economic recovery and long-term competitiveness.

Three Key Takeaways



1. Heavy hit, light adapting: Metallurgy output has collapsed while textiles show resilience by relocating and shifting to wartime needs.



2. Workforce gap:

Employment in manufacturing must grow **75% by 2032**; severe shortages are stalling recovery.



3. Invest to compete:

Targeted training and labor mobility— especially for women and IDPs—are key to rebuilding the sector.

HEAVY INDUSTRY - MOST IN-DEMAND PROFESSIONS IN METALLURGY BY QUALIFICATION LEVEL

Professions	Skill level
Laborers	UNSKILLED/SEMISKILLED
Loaders	UNSKILLED/SEMISKILLED
Warehouse operators	UNSKILLED/SEMISKILLED
General helpers	UNSKILLED/SEMISKILLED
Blast furnace operators	SKILLED
Crane operators	SKILLED
Machine operators	SKILLED
Fitters	SKILLED
Metallurgical engineers	HIGHEY SKILLED
Maintenance engineers	HIGHLY SKILLED
Quality control specialists	HIGHLY ŠKILLED
Production managers	HIGHLY SKILLED

LIGHT INDUSTRY - MOST IN-DEMAND PROFESSIONS IN TEXTILE INDUSTRY BY QUALIFICATION LEVEL

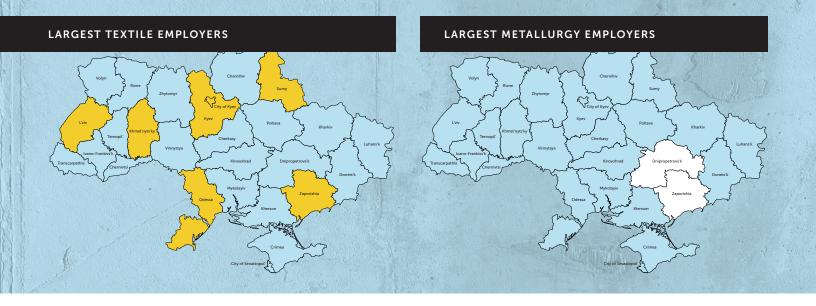
类的	Professions	Skill level
	General helpers	UNSKILLED/SEMISKILLED
	Packers	UNSKILLED/SEMISKILLED
	Warehouse operators	UNSKILLED/SEMISKILLED
	Loaders	UNSKILLED/SEMISKILLED
(e)	Sewing machine operators	SKILLED
	Textile processing technologists	SKILLED
(S)	Mechanics for equipment maintenance	SKILLED
	Leather processing specialists	HIGHLY SKILLED
	Quality control inspectors	HIGHLY SKILLED
	Production engineers	HIGHLY SKILLED
	Maintenance managers	HIGHLY SKILLED



Labor Demand

What We Know: Labor shortages are a critical challenge across Ukraine's manufacturing sector, though the dynamics differ between heavy and light industries. Metallurgy—a cornerstone of heavy industry—faces acute deficits, with around 4.6 vacancies per candidate by late 2024, especially in weapons, tools, and wire production. Employment has dropped by 32% since 2021, and workforce recovery is essential to meet gross domestic product (GDP) goals, which require expanding the total manufacturing workforce from 1.62 million to 2.84 million by 2032. In contrast, light industry, particularly textiles, has shown more resilience and adaptability but still struggles to attract skilled sewing machine operators, technologists, and quality specialists, among others. While not as severe as metallurgy, light industry still had 2.8 vacancies per candidate in late 2024.

Why it Matters: Ukraine's economic recovery hinges on both the rebuilding of heavy industrial capacity and the scaling of an agile, export-ready light industry. Before the full-scale invasion, metallurgy alone contributed nearly 10% of Ukraine's industrial output and about 25% of its goods exports. These industries are deeply integrated into global supply chains, especially in Europe. Transitioning away would require decades and massive investment to replace this revenue. Persistent labor gaps risk slowing production, delaying reconstruction, and weakening competitiveness in both domestic and global markets.



Recommendation: Focus on attracting and retaining workers where demand is highest. Donors and private partners can support incentives for worker mobility (e.g., relocation packages, housing support), wage-stabilization initiatives to counter rising labor costs, and programs that re-engage diaspora and displaced workers in sectors with critical labor shortages.



Pipeline and Supply Gaps

What We Know: Ukraine's manufacturing workforce has thinned and shifted, with stark regional imbalances. Heavy industries like metallurgy have lost 32% of their workforce since 2021, falling to 140,700 workers, while light industry saw a smaller decline to 92,100 workers. Training programs for heavy industry remain concentrated in hubs like Zaporizhzhia, which is logical given the fixed location of major plants. By contrast, textile and apparel firms have relocated westward to safer regions like Lviv, but the training infrastructure has not kept pace, creating localized shortages of new workers.

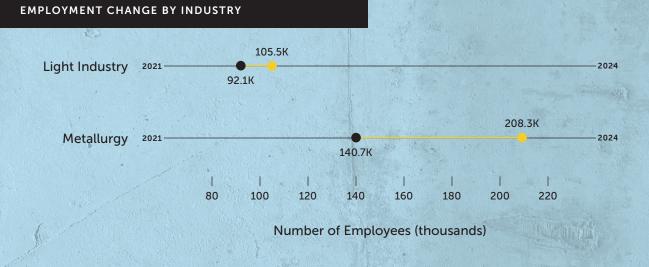
Why it Matters: Even with sufficient demand, labor pipelines are not producing enough workers in the right regions, limiting potential recovery and weakening industrial capacity.

Recommendation: Donors and private partners should invest in expanding and modernizing regional training pipelines, with a dual geographic focus that addresses both heavy and light industry needs. For heavy industry in eastern hubs like Zaporizhzhia, this means supporting localized vocational training and apprenticeship programs that directly feed metallurgical plants, while creating incentives for displaced workers and diaspora professionals to return when conditions allow. For light industry in western regions such as Lviv, rapid-deployment training centers and mobile units are needed to meet the labor demands of relocated textile and apparel firms. Cross-sector interventions should include public-private partnerships to predict labor demand and align training efforts with real-time industry needs.



Skills Gaps

What We Know: Even where workers are available, critical skills are missing. Metallurgy faces acute gaps in high-skill technical roles such as blast furnace operators, crane operators, metallurgical engineers, and production managers. These roles require extensive hands-on training, and many experienced specialists have left the workforce since 2022. Light industry, while more adaptable, struggles to recruit enough sewing machine operators, textile technologists, and quality control specialists, as relocation to western regions has outpaced local training capacity. Across both subsectors, employers report that skills gaps account for over 45% of production constraints.



Why it Matters: Skills mismatches undermine productivity, delay reconstruction, and increase production costs, making Ukrainian manufacturers less competitive in European supply chains.

Recommendation: Addressing skills mismatches requires co-investment in targeted, industry-specific training solutions tailored to both heavy and light manufacturing. For metallurgy, this means launching employer-led apprenticeship schemes designed with industry input to train for critical roles such as blast furnace operators and engineers, as well as fast-track certification programs to quickly upskill midlevel technicians into specialized roles. In textiles, the focus should be on expanding short-term modular training programs, paired with stipends, childcare support, and job placement guarantees to encourage workers to participate. Across both sectors, collaborations with EU partners should introduce micro-credentials and online platforms that modernize technical skills, helping workers adapt to automation and sustainable manufacturing practices.

About IREX

IREX is a global development and education organization. We strive for a more just, prosperous, and inclusive world in which individuals reach their full potential, governments serve their people, and communities thrive. With an in-country presence in Ukraine for over three decades, IREX has been driving transformative change by investing in human capital, catalyzing innovation, and empowering communities. With a dedicated team operating across all regions at both national and local levels, IREX continues to ensure sustainable development through the war with a deep commitment to building a brighter future for Ukraine and Ukrainians.

About EasyBusiness

EasyBusiness is a nonprofit Think-and-Do tank with the mission to drive Ukraine's recovery and economic growth by fostering private-sector development, with a particular focus on advancing Ukraine's integration into the European Union. The organization combines research with actionable solutions to address barriers, empower local communities, and promote sustainable development. Guided by freedom, responsibility, initiative, trust, and respect, we work to create a thriving, competitive economy.

METHODOLOGY. This brief synthesizes data from quantitative labor market analysis, employer surveys, and expert interviews conducted by EasyBusiness. It focuses explicitly on labor demand, training pipeline issues, and skills gaps in Ukraine's manufacturing sector, presenting targeted recommendations to inform donor and private-sector interventions. Estimates for additional required employment in each sector are from the ILO.