



Survey Results of the Work Package on Lessons from Business (MNEs and SMEs) on Filling Skill Shortages Global Strategies for Skills (GS4S) Project

1. Research Objective

With ageing populations, aftershocks from COVID-19, and new skill demands due to the green and digital transitions many businesses are struggling to fill their skill needs. That raises important questions. What responses can businesses employ? And, importantly, what works best to ensure access to the talent they need?

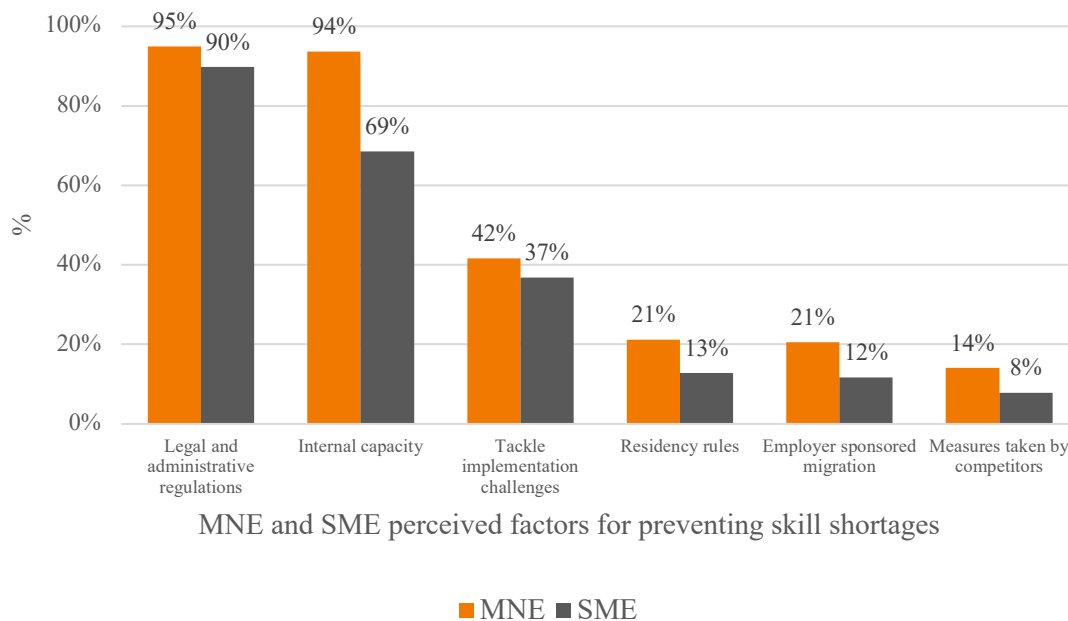
2. Sample and Data

To shed light on this critical matter, we conducted a survey among MNEs and SMEs in Estonia, the Netherlands, Germany and Switzerland, and four sectors particularly hard-hit by skill shortages: construction, health, IT, and manufacturing. We define MNEs as firms that have 250+ employees with international sales and the ability to move staff across borders. SMEs are defined as firms that have less than 250 employees. In total, 4,409 businesses responded, providing detailed insights into their characteristics, the skill gaps they face, what is driving those gaps, and, crucially, which responses are proving the most effective in closing them.

3. The Use of Migration by MNEs and SMEs

Rather high or very high skill shortages are reported by 39.9% of MNEs and 40.6% of SMEs. In response to these, we find that the facilitation of migration is common but more prominently among MNEs than SMEs (see Figure 1).

Figure 1. MNE and SME perceived factors for preventing skills shortages



Migration related options consist of legal and administrative regulation (such as visa regulations and work permits), employer-sponsored migration, and residency rules (such as limited right to stay, or limited labour market access for spouses). The other strategies focus on domestic

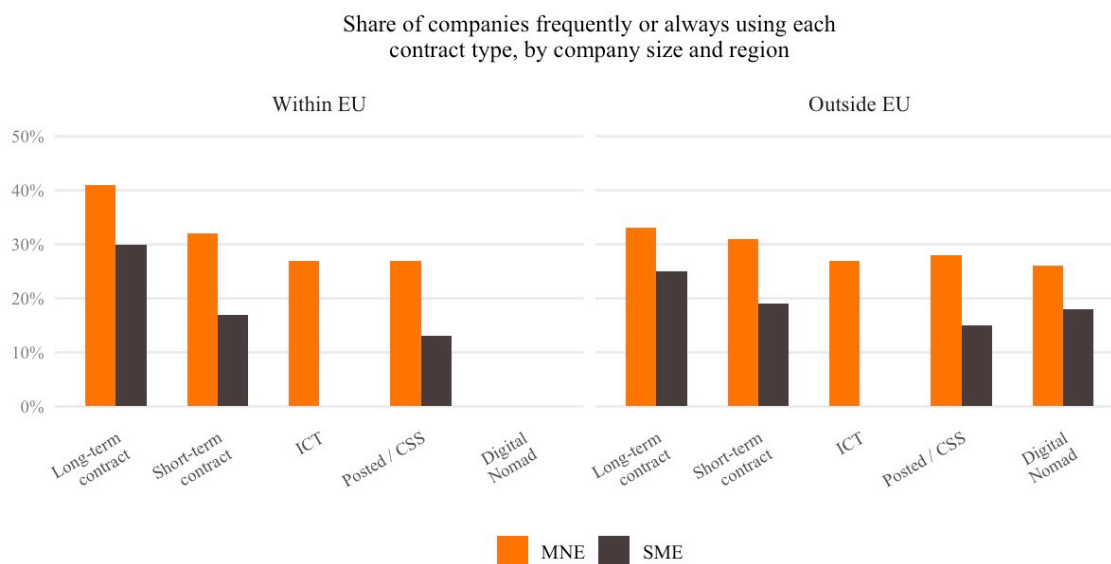


measures such as internal capacity (skill level of the existing staff or the product and service quality), tackling implementation challenges (time or money needed to address skills shortages), and learning from competitors.

4. Skill Shortage Filling Strategies within and outside the EU

In relation to migration-related strategies, we examined the extent to which companies address skill shortages by hiring workers from abroad using non-traditional contracts. These arrangements are characterized by decoupling between the worker’s physical presence (in a host state) and the legal and contractual locus of their employment (in another state), and include Intra-Corporate Transferees (ICT), posted workers, contractual service suppliers (CSS) and digital nomads. As Figure 2 below shows, we find that (i) firms are more often hiring workers from within than outside the EU, and (ii) MNEs use these contracts more frequently than SMEs, yet (iii) even among SMEs, these types of contracts are almost as common as traditional short-term contracts.

Figure 2: Share of companies using different contract types







ICT only applicable for MNE. Digital Nomad only applicable outside the EU.
 Figures are % of companies reporting hiring within and outside the EU respectively.



5. Sectoral Overview of MNE Strategies for Filling Skill Shortages

Table 1: Combinations of institutional conditions and firm response strategies

Sector	IT						HEALTH				CONSTRUCTION		MANUFACTURING			
	1	2	3	4	5	6	1	2	3	4	1	2	1	2	3	4
Reason shortage: difficulty finding skilled workers due to lack of education and training	☒	☒	☒	☒			☒	☒	☒		☒		☒	☒	☒	☒
Response: outsourcing or offshoring*		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☒	☒	☑	☑
Response: automation		☒	☑	☑	☑	☑	☑			☑	☑	☑	☒	☑	☑	☑
Response: participating in skill inflow initiatives	☑		☑	☑	☑	☑		☑	☑	☑	☑	☑	☑	☑	☑	☑
Response: hiring within EU via long-term or short-term contracts*	☑	☑	☑		☑	☑	☑	☒	☑	☑	☑	☑	☒		☑	☑
Response: hiring outside EU via long-term or short-term contracts*	☑	☑		☑	☑	☑	☑	☑	☒	☑		☑		☑		☑
Institutions: hard barriers	☑	☑	☑	☑	☑	☒	☑	☑	☑	☑	☑	☑	☑	☑	☑	☒
Institutions: soft barriers	☒	☒	☒	☒	☒	☑	☒	☒	☒	☒	☒	☒	☒	☒	☒	☑
Number of cases in pathway	27	13	19	18	25	6	13	4	4	14	14	13	5	6	15	3

Legend:  = core present condition,  = peripheral present condition,  = core absent condition,  = peripheral absent condition.

Notes: * on any of the listed strategies



We focused on

- MNEs as they have the widest range of tools to respond to skill shortages. By applying Qualitative Comparative Analysis, we identified combinations of conditions associated with successful skill shortage filling strategies (see Table 1). Green ticked cells indicate key drivers, whereas light green ticked cells show supporting factors. Crossed red cells indicate what must be lacking, and light orange crossed cells capture factors that are missing to a lesser extent in a given pathway. Empty cells are factors that are not important.

The big picture: no single fix

- There is no one-size-fits-all solution. Successful responses vary by sector and by firm.
- IT and manufacturing: automation combined with government-backed talent inflow programmes is the winning combination. Some firms substitute automation with recruitment outside the EU through long-term or short-term contracts where skill inflow initiatives do not matter. Where hard barriers are particularly felt, participation in skill inflow initiatives alone (without the reliance on automation and within EU recruitment) gains significance.
 - As can be seen in Figure 3, smaller multinationals in IT lean heavily on automation, and it works. Larger IT multinationals often cannot execute on automation effectively; organisational inertia is likely an impediment. These firms compensate by hiring talent from outside the EU. These larger firms also tend to skip government training support as their internal capabilities are strong enough (see Figure 4).
 - In manufacturing, firms that don't automate tend to be larger, and inertia likely explains why.
- Health: both automation and migration focused approaches work; outsourcing and offshoring play an outsized role particularly in the absence of within and outside international recruitment pipelines via long-term or short-term contracts. Where these contracts are frequently used, firms also benefit from automation. Interestingly, large and small MNEs are not asymmetrically burdened by hard barriers such as qualification recognition.
 - Larger firms in health rely less on automation.
- Construction: outsourcing and offshoring also matter here; automation is less of a factor.

Figure 3: IT sector, type of successful skill shortage response

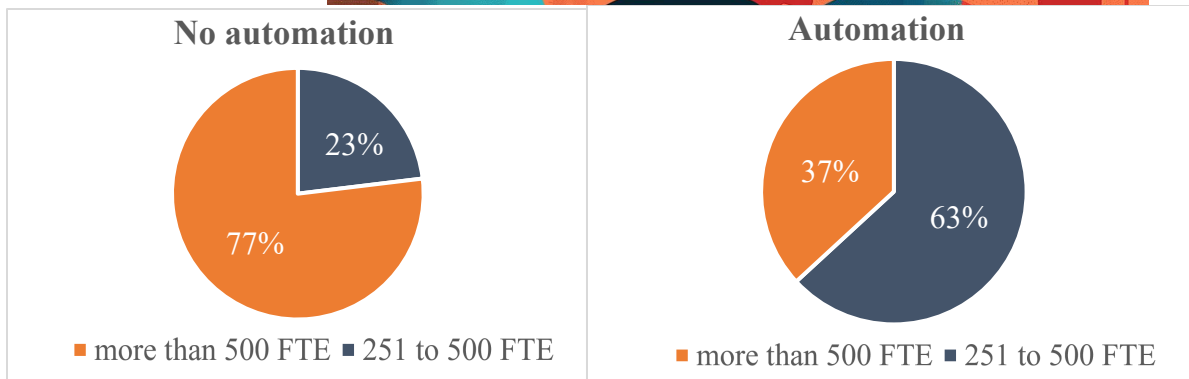
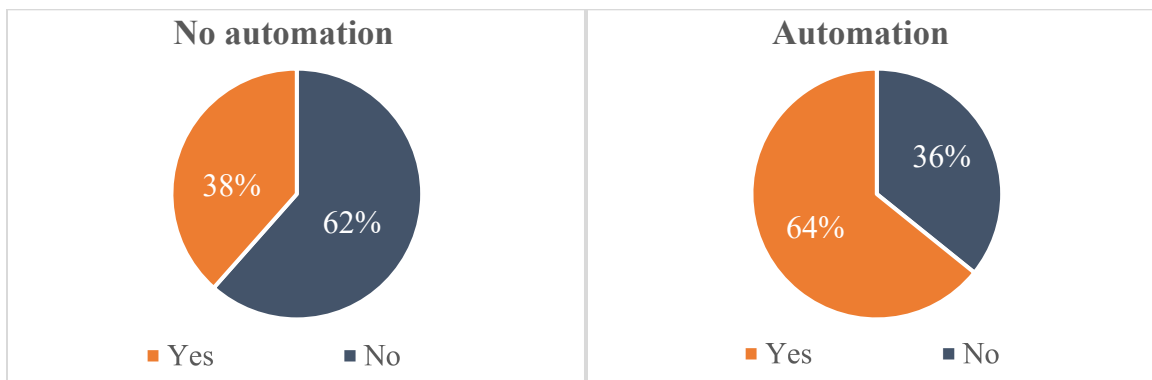


Figure 4: IT sector, successful firms: "would government subsidies for training programs help?"



6. Conclusions

The EC's *Union of Skills* targets upskilling, mobility, and foreign talent attraction, with a Skills Portability Initiative due in 2026. The finding that skill inflow initiatives only gain significance where firms face hard barriers and lack alternatives suggests demand for these programmes is narrower than policymakers assume. And where non-standard contracts are used, firms are incentivised to access workers without workers' access to the local labour market. This raises equity concerns regarding working and salary conditions that should be addressed by all players involved.

EC's *Apply AI Strategy* that targets SMEs is consistent with our finding that smaller IT firms execute automation better, but most EU AI funding flows to large-scale infrastructure (Think Tank Europa, 2025). This is unlikely to resolve the organisational inertia blocking automation in larger MNEs.

Furthermore, the prominence of outsourcing and offshoring in health and construction represents a firm-level strategy that EU skills policy largely ignores, being focused primarily on direct employment and





recruitment pipelines. Policymakers should consider whether these arrangements are filling gaps that better-designed inflow programmes could address more sustainably.

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