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Management Workforce Localization and Skill Development in Ethiopia's Light Manufacturing

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IDCEA summary

The Industrial Development, Construction and Employment in Africa (IDCEA) is an ESRC-funded project that focuses on gathering concrete information on the employment effects of firms investing in manufacturing and building infrastructure in Africa. After an initial study of comparative employment dynamics in domestic and foreign firms in the manufacturing and infrastructure construction sectors of Angola and Ethiopia, focusing on low- and semi-skilled production/operation workers, the last phase of the project consisted of a more focused study of workforce localisation issues and skill development for management workers in Ethiopia's emerging foreign-owned textile and apparel companies. Overall, IDCEA aims to inform academic and policy debates on the nature and dynamics of new jobs in manufacturing and construction in Africa, and the contributions of FDI in the process.

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Our aim is to develop a clearer picture of the constraints on, and opportunities for, filling middle-level management positions in Ethiopia's foreign owned apparel firms with Ethiopian staff. We hope our findings will help support interventions to maximise skill development and workforce localisation, particularly in export-oriented production. Our research provides answers to the following questions:

A. What difficulties do firms in the export-oriented light manufacturing sector in Ethiopia face in hiring suitable local managers?

B. How are organizational and managerial capabilities transferred to new local managers at factory level?

C. To what extent do existing national training provision systems contribute to suitable skill development for the incorporation of local managers in new globally integrated textile and apparel firms?

To answer these research questions, we drew on a combination of literature reviews, qualitative interviews with company senior managers, Ethiopian middle managers, government officials, representatives of training institutions and other key informants, and key firm-level and national-level datasets.

Main findings

1. The localisation of the management workforce in new foreign-owned apparel factories has been slow but gradually improving since 2018, with some firms, especially larger and more globalised ones advancing more rapidly than others. The timeframe is however too short to reliably assess trends, especially considering the impact of COVID-19 and the current conflict on employment levels in industrial parks. Most sampled firms started operations in 2017 and had to incorporate a workforce with limited experience in global production networks. There was a consensus that most Ethiopian managers did not have the relevant experience when hired and had to be trained from rather low levels, to understand the required skills in this industry as well as to learn corporate culture. Many foreign managers reported that it would take at least five years for a local manager to assume senior management roles.Certain senior management roles (finance, commercial and marketing department) are often reserved to foreign managers partly because they require experience and communication skills in negotiation with international customers but also because of issues of 'trust' and information confidentiality on the part of owners and top company managers. This practice may also be related to imperatives of production and labour control in a tightly competitive global industry, which lead to segmentation of the management workforce.

2. Turnover is relatively high but not a serious problem, according to most senior managers in sampled companies. Retention of high-quality managers is an important priority for most firms, given the costs involved in training them from a low base. The main mechanisms of retention are annual salary increments combined with promotion to roles with greater responsibility and decision-making autonomy. However, only few companies have clearly structured career pathways and actively pushed Ethiopian managers to train and assume more responsibilities. A major factor impeding the effectiveness of retention measures via salary increments and promotion is a substantial divergence in expectations between foreign senior managers and Ethiopian middle managers. Whereas Ethiopian managers expect higher increments and faster promotions, senior company managers report these demands are out of touch with the realities of low-margin globally integrated firms. It was nonetheless acknowledged in many firms that Ethiopian managers play a key role in bridging communication gaps between foreign senior managers and local production workers, which contributes to reducing turnover of production workers, and generally less conflictive industrial relations. Therefore, the pay-off of effective retention packages may in the medium-term outweigh the costs of retention measures.

3. Firms transfer significant knowledge and especially organizational and managerial capabilities to Ethiopian managers through a variety of formal and informal mechanisms, but such transfers are hampered by problems with incentive systems. Some foreign managers have an incentive to stay in their job and limit knowledge transfer to avoid being replaced. Ethiopian managers may move for better opportunities in other firms and therefore discourage firms from investing more in knowledge transfer. All firms engaged in different forms of training, from induction programmes, HQ visits, soft-skill training, to 'shadowing' more experienced managers. Informal on-the-job training was generalised and considered one of the most effective ways of transferring the tacit knowledge necessary to run operations in a high-pressure environment where demands from international customers create the need for constant adaptation. Formal structured training was considered useful only for limited aspects of managers' jobs, e.g. computer skills, company information systems, HR processes. More professionally managed and globalised firms had more structured training frameworks, including inductions focused on key soft skills, periodic managerial/technical training with evaluation, and visits to HQs and other 'model' factories usually in Asia. Therefore, despite the overall preference for ongoing on-the-job informal skill development, training provision significantly depends on the type of company and their international experience.

4. The quality of training in Ethiopian institutions is variable and not yet adequate to the needs of firms integrated into highly competitive global production networks. Most firms value the theoretical knowledge acquired by Ethiopian graduates, which makes them immediately trainable, but decry the gaps in practical skills, computing skills, and knowledge of new production processes, technology and equipment. There is also some concern over the lack of soft skills and adaptation to high-pressure work environments where quick troubleshooting skills and work flexibility are deemed essential attributes, although it is not clear how training institutes can provide these skills without a suitable formula for on-factory learning experiences. While some senior foreign managers also

highlight the lack of effective communication in English as a further gap, Ethiopian middle managers regard English language as one of the benefits of their graduate training. A lack of coordination between different Ethiopian training institutions was found to be a binding constraint on more effective university – private sector linkages, which would be important especially for two purposes: (a) curriculum reform and development towards modernised methods and systems; (b) availability of apprenticeship/real factory training experiences for students.

Main policy recommendations

1) A more consistent enforcement of Directive 772/2021 for worker visa restrictions on management employees could accelerate the transition to a more localised management labour force. Two considerations are worth noting. First, the institutions in charge of monitoring and enforcing the directive need to be equipped with the knowledge, tools and high-level political support to carry out the task or different agencies tackle different aspects of this monitoring process. Second, a consistent enforcement does not necessarily mean a blank enforcement without due consideration of the situation of the industry, the pressing needs facing companies and the circumstances of particular cases. The monitoring and enforcement needs to be evidence-based and therefore calls for strengthening the capacities of agencies in charge in order to gather all the necessary evidence on company needs and constraints on localization.

2) Incentivise firms to undertake training and upgrading of local managers by attaching certain ‘rents’ (prioritised access to subsidized credit, access to foreign exchange, discounted logistics costs, marketing support, access to expanded industrial park area, etc. for the best performers) to the achievements in training and retention of Ethiopian managers in key positions of production management, logistics, customer relations, quality control, where learning is much needed. This intervention would require a set of reasonable ‘targets’ in the employment of Ethiopian managers in a range of middle- and senior-level management positions, especially production management. If the expansion of such ‘rents’ is not feasible due to the economic and business climate, an alternative would be to create some form of recognition to management workforce localization efforts, such as national awards/prizes and dissemination of best practice in the sector, i.e. ‘naming and rewarding’.

3) Support improvements in training provision for managers to be employed in the textile and apparel industry. There are three sets of interventions that should be considered:
   a) Modernising equipment and infrastructure in training institutes to make sure practical lessons are conducted with the most relevant technology/machinery as used by export firms linked to global production networks.
   b) Revise curriculum with the aim of improving and expanding the provision of training in up-to-date practical knowledge, soft skills for factory managers and modern computer skills.

c) Revamp and improve platforms of collaboration/partnership between University (Training institutions), industry (especially foreign-owned export firms), and other relevant partners (e.g. GIZ, ILO) to support the previous two areas of intervention (see above) and strengthen the dialogue university-industry for the sustained improvement in the quality of graduates in relevant management positions.

1. Introduction

The process of building an industrial workforce is a protracted, complex process that often faces a variety of obstacles along the way, both in early industrialising countries and late industrialisers. With globalisation and the emergence of global production networks (GPNs) the speed of change in newly industrialising countries has accelerated leading to the phenomenon known as 'compressed development', clearly manifested in Asia in the past fifty years (Whittaker et al. 2020). In the era of GPNs, relocation of manufacturing across multiple sites, increasingly in developing countries, has become more common. From the relocation of light manufacturing to East Asia, then onto new export sources like Bangladesh and Southeast Asian economies, and more recently to low-income countries in Africa, such as Madagascar and Ethiopia, this process has generated renewed prospects of export-oriented industrialization in countries still aspiring to build an industrial base to accelerate economic development, job creation for a growing labour force and export revenues to increase much needed foreign exchange (Calabrese and Tang 2022).

As industrial firms establish new manufacturing bases in countries with limited industrialization experience, several opportunities and challenges arise. Manufacturing FDI is associated with transfer of knowhow and organizational capabilities and spillover effects that may be instrumental to a broadening of the process of economic transformation and structural change in low-income countries (Calabrese and Balchin 2022; Khan 2019). However, this skill and technology transfer is neither automatic nor quick. Obstacles arise in the process which may limit the strength of such linkages or slow down the transfer of knowledge and skills (Park and Tang 2021; Alves and Lee 2021). The factories starting in Ethiopia in recent times face the twin challenge of attracting a trainable and motivated workforce in a context of limited industrial development and meeting the productivity and quality imperatives of global production networks. To meet these challenges *access to high quality managerial capabilities* at different operational levels and not simply industry-specific is critical for firms' success. However, despite having a large number of potential candidates for these positions, as this report will show, the reality in the last few years is that attracting, training and retaining a suitable industrial managerial workforce has proven difficult for many export-oriented companies, leading to a continuous reliance on expat managers in many foreign-owned firms operating in African countries (see Ellis et al 2021). Paradoxically, labour constraints, especially the lack of experienced and skilled workers and labour turnover problems, may impair the achievement of the ambitious industrialization goals of Ethiopia and other African countries.

The integration of a local management workforce is one of the challenges facing foreign investors in manufacturing production in low-income countries, but the reliance on foreign (expat) managers is a longstanding issue in the literature on international human resource management (Zhu et al. 2018). An effective management of the factory floor is crucial to the success of a globally integrated firm, to meet demanding productivity, efficiency and quality requirements in highly competitive global production networks (Ellis et al. 2021). The adoption of organizational routines and labour processes that are consistent with a fiercely competitive environment and strict time efficiency and quality requirements is an essential part of the transition most companies undergo when investing in countries like Ethiopia, with limited experience in GPNs (Oya and Schaefer 2021). The role of managers, both senior and middle-managers, is critical to this transition process.

After a previous employment-focused research project that highlighted some of the challenges facing the sector in the early stages of development (Oya and Schaefer 2019), and emerging research on issues of skill/technology transfer, spillover effects of manufacturing FDI, local industrial capabilities (Calabrese and Tang 2022; Whitfield, Staritz, & Morris, 2020; Brautigam et al. 2018; Tang 2019), we identified the need for more in-depth research onto the obstacles to the process of localization of management workforces and the transfer of key managerial skills in the newly established IPs in Ethiopia.

The main aim of this study was to develop a clearer picture of the constraints on, and opportunities for, filling middle-level and senior management or supervisory positions with Ethiopian staff in apparel industries, with a focus on foreign-owned companies. Our main research questions were:

1. What difficulties do firms in the export-oriented light manufacturing sector in Ethiopia face in finding and hiring suitable local managers?
2. How are organizational and managerial capabilities transferred to new local managers at factory level? With what effects?
3. To what extent do existing national training provision systems contribute to suitable skill development for the incorporation of local managers in new globally integrated textile and apparel firms?

We tried to address these questions by conducting dozens of interviews in Ethiopia's Industrial Parks and government offices in 2021, and collecting data from relevant government agencies. The qualitative study gathered views and facts from interviews with senior managers of a variety of foreign-owned textile and apparel firms, as well as Ethiopian middle managers employed by these companies, complemented with interviews with relevant government officials with experience in the sector, and representatives of training provision institutions that are most appropriate to the textile and apparel industry (e.g. Bahar Dar University).

The report is organised as follows. Section 2 presents a literature review on the question of management workforce localization with comparative evidence from Asia and Africa, and a focus on light manufacturing. The literature review also surveys studies focusing on the skill provision systems in Ethiopia's manufacturing and the range of expected and achieved effects in relation to skill needs in the sector. Section 3 provides the context on the rise of the textile and apparel sector in Ethiopia, the key drivers of FDI into the new IPs since 2015, and the effects of the disruption caused by the pandemic and the conflict since 2020. This is followed by a brief section outlining the research design and process, and the main characteristics of the sample of interviews. The main findings of this study are presented in Section 5, organised around three main themes: (a) drivers and barriers to management workforce localization; (b) retention of local managers; (c) training and skill provision on the factory job; (d) Ethiopian training provision system for the textile and apparel industry. The report ends with a summary of conclusions and key policy recommendations.

2. Literature review: management workforce localization and factory organizational capabilities

Before laying out the finding of our own empirical work, this section will distil the main themes, debates, and concepts derived from a targeted literature review of organisational capabilities, learning, and managing factories, focusing mainly on the apparel sector. We pay particular attention to the issues of management workforce localisation, expatriate management in FDI firms, and the interlinked issues of skills training and turnover.

Learning to manage the factory floor: organisational capability, work culture and knowledge transfer

Developing a capable managerial labour force is crucial ingredient in industrial development (Amsden, 2001). In the context of transnational companies this entails developing organisational capabilities through internalising organisational cultures and adapting the production process to country-specific contexts. This is of particular importance to boosting productivity and maintaining competitive advantage. Historically, developing a local managerial workforce and incorporating it into the production learning process has been integral to structural transformation (Chang and Andreoni, 2020).

Khan (2019, p. 45) defines organisational capabilities as the "knowledge required for efficient collective activity" and distinguishes between basic, intermediate and dynamic capabilities. Basic and intermediate capacities are necessarily to become competitive in existing products and services, while dynamic capabilities encompass the sets of skills and organisational routines needed to develop entirely new products and services. Middle managers lie at the pivot of developing organisational capabilities. They are used as efficient implementers of top management strategies and productivity goals due to their familiarity with the production process and ability to translate pressure to the workforce (King et al., 2001; Tang, 2016). Middle managers need to have particular competencies and attributes to develop managerial skills. King et al. (2001) point out that these competencies vary nationally and globally across sectors and contexts, impacting the sector's competitive advantage and productivity. They define four attributes that can be used to assess and identify managerial competencies: tacitness, robustness, embeddedness, and consensus (King et al., 2001). Tacit knowledge, which refers to knowledge that is not easily codified or communicated to others, and consensus, i.e. the extent to which managers share a common understanding of necessary competencies, are two core attributes of managerial competencies in the light manufacturing industry. Developing middle managers' capabilities requires creating a learning culture with clear objectives, targets, and values (Huy, 2001; King et al., 2001). Learning and training require longer-term, extensive experiments in socio-cultural practices (Fu et al., 2019, De Ceiri and Dowling, 1999).

Unfortunately, we still know too little about how companies develop organisational capabilities through learning-by-doing under market compulsions (Khan, 2019). Standard economic theory, drawing on models developed by Gary Becker, for a long time assumed that government subsidies or regulations with regard to training were unnecessary. The intuition was simple: workers possess (or can develop) both general and job specific skills. While the former are useful to all firms, the latter are useful only in the current job. Firms therefore have limited incentives to invest in general training as they would be unable to recoup training costs when workers leave for other jobs. However, a market failure is avoided by workers shouldering the costs of developing general skills, either through loans to pay for training or by accepting lower wages during the training period. This view was challenged by Acemoglu and Pischke (1999) in a seminal reassessment of skills development, particularly sector-specific and job-specific skills. Much of the training needed to develop such skills is conducted via intangible forms such as mentoring and advice. Acemoglu and Pischke demonstrate how labour market ‘imperfections’ which compress the wage distribution provide incentives for firms to invest in general training. Nevertheless, this perspective does not directly address crucial issues such as the heterogeneous realities of different factory floors and second-order learning by workers and managers.

Some of these issues are taken up by Andreoni (2010, 2014), who provides a framework incorporating technical, organisational, and dynamic capabilities. Andreoni breaks open the ‘black box’ of the production process to analyse how capabilities impact on the organisation and sequencing of specific tasks and materials by particular agents of production in a networked process. Capabilities, as capacities to act, require knowledge geared towards practical application, or know-how. Moreover, organisational capabilities are closely linked to routines: capabilities can become routinised and routines can in turn emerge as capabilities (Andreoni, 2010). The challenge then is to understand how capabilities can be routinised in different contexts.

Developing new capabilities requires the accumulation and transfer of practical knowledge with direct application to processes of design, production, logistics, sales and marketing. Knowledge transfer is embedded in organisational structures, cultures, and employee relations, where each organisation has a specific configuration of knowledge (Spencer, 2008). However, the extension of global production networks (GPNs) to low- and middle-income countries has served to highlight important barriers to developing organisational capabilities through rearranging organisational structures and work-culture adaptation to fit local contexts, as well as the dearth of analytical perspectives able to capture these processes in the emerging production hubs of Africa, Asia and Latin America (Ramirez & Rainbird, 2010). A key challenge involves the localisation of management staff. The process of localisation of factory floor managers involves the transfer of both codified knowledge and tacit knowledge. As indicated above, codified knowledge (also called explicit knowledge) can be written down and transmitted from firm to firm and from person to person (Alves and Lee, 2022). Tacit knowledge (also called implicit knowledge) is a form of knowledge that cannot easily be written down or articulated orally and, therefore, disseminated. Tacit knowledge is embedded in complex routines acquired through practices and intimation (Calabrese and Balchin, 2022; Khan, 2019; Khan, 2013a; King et al., 2001). In other words: 'Tacit knowledge requires frequent interaction between firms and individuals to be passed on, for example, through social networks in which firms are embedded' (Whitfield et al. 2020, cited in Calabrese and Balchin, 2022, p.35).

This makes it crucial to understand how codified knowledge and tacit knowledge are transferred. Fu et al. (2019) identify two ways managerial knowledge is transferred. The first channel is through training programs which allow trainees to acquire codified knowledge from textbooks, formal education and traditional training. Tacit knowledge, on the other hand, is developed and transferred through learning-by-doing (Khan, 2013a; Khan, 2019). A key constraint regarding the localisation of middle management then lies in the difficulty of transferring tacit knowledge.

Localisation of the management workforce in foreign-owned textile and apparel sectors

Drivers of localisation and main constraints in retaining local managers

The localisation of middle management has a number of important advantages (Gamble, 2011). First, it helps companies overcome language barriers and enables easier access to networks and contacts in the host country. Second, it signals the firm's commitment to developing skills in the host country to local and national authorities. Third, it reduces the costs associated with employing expatriate managers. Fourth, it enables multinational enterprises to 'think globally, act locally', i.e. to situate the company's strategy in the global market context while adapting to specific local conditions of the subsidiary. Expatriate managers are often expected to develop their own successors by passing on technical knowledge and managerial skills.

In many cases, the efforts foreign-owned firms make to localise and retain high-quality local managers are complicated by high managerial turnover (Tang, 2016; Gamble, 2011). To stabilise their managerial workforces, firms need to understand why local managers are dissatisfied and identify the reasons behind labour turnover. Managerial turnover after training is common in light manufacturing industries, and can be higher than worker turnover (Selmer, 2010). The result can be lower overall investment in training. For instance, a study of Chinese firms in Egypt's tableware industry shows that Chinese managers were reluctant to provide advanced training to local managers due to their high rates of turnover (Tang, 2016). The loss of skilled employees combined with other issues, such as the difficulty of communication and inefficiency in the production line, led to the reluctance of localisation. The causality appears to run on both directions though. A study of Ethiopia's leather industry illustrates how high labour turnover can result from insufficient training (Woretaw, 2012).

In addition, one question arises: if firms have incentives to provide managers with adequate training and monetary compensation schemes that fit their job descriptions and productivity levels, why is managerial turnover still high? The human resource management and organisational behaviour literatures devote considerable attention to these issues. Various scholars indicate that a crucial constraint to managers' retention is the lack of progressive reward systems that capture the social nuances that can assist in the retention of better-trained managers and, over time, build organisational capabilities (Fu et al., 2019; Festing and Tekieli, 2018). Moreover, retention appears to benefit from rewards and compensation beyond monetary compensation and some scholars stress the relative importance of nonmonetary incentives (e.g. Cassar and Meier, 2018).

The role of expatriate managers

In comparison with local managers, who are often initially less experienced, expatriate managers tend to possess more of the capabilities that are central to maintaining the firm's competitive advantage. These capabilities are identified through the managers' ability to achieve specific productivity goals. They have sector-specific troubleshooting skills (both machinery and/or labour related) specific to the parent company's nature and a range of contexts in which a global supplier operates (Gamble 2011).

Although the local workforce is more economical and easily accessible, it is likely that foreign companies will still rely on expatriates in key managerial positions (Fei, 2022) for different reasons. The first is to ease conflicts with the unfamiliar culture and customs in the local context (Fei et al., 2018). The second is to ensure a more sophisticated and perhaps harsher labour regime is implemented given the pressures of global production networks in garment (Oya, 2019; Schaefer and Oya, 2019). A third factor is 'the stereotype of locals lacking preferred employee characteristics' (Fei et al., 2018, p. 0456). A study on training in the private sector in Papua New Guinea by Bhanugopan and Fish (2007) provides a clear example. Despite the government's provision of relevant education and training, job availability remains limited due to the perception of expatriate managers that local staff lack the capabilities required to boost productivity. Bhanugopan and Fish's paper highlights the importance that expatriate contracts make the commitment to training local employees explicit with specific clauses. Lastly, in western multinationals, expatriate managers are believed to contribute to effective communications and managerial consistency between headquarters and foreign subsidiaries (Gamble, 2000; cited in Fei, 2022, p. 9). Expatriation, therefore, helps to grow a cadre of employees with global experiences (Fei, 2022). Evidence across different manufacturing sectors in Africa suggests the preference by foreign-owned companies for expat management workers is well established. Ellis et al. (2021) analyse large samples of manufacturing firms in Tanzania and Ethiopia and find that in both countries the proportion of expat managers and administrative staff in foreign-owned entreprises is significantly higher than in domestic firms. The effect is somewhat even larger in Chinese-owned firms, where the preference for trusted and experienced expat managers even in middle-level positions is common (Ellis et al. 2021). According to this study, this tendency occurs despite the fact that foreign-owned firms are more likely to provide training to their local workers and therefore potentially upgrade them into higher level positions within the firm. However, a ceiling on management positions for local workers seems to operate in globally integrated foreign-owned manufacturing firms in these countries. In the case of Chinese firms, Fei (2022) suggests there are some specific additional reasons for the persistence of expat management presence. For example, these companies tend to have equipment and operating systems all in Mandarin, thus language barriers become binding for local employees who are not fluent in the language and experienced with the systems. Moreover, Fei (2022) also suggests that the reliance on foreign managers in Chinese-owned firms responds to functional needs, making sure communications between subsidiary and headquarters of multi-sited firms run smoothly; and to a 'discursive construction of locals as less capable and less committing to work' (Fei 2022, 10), which reproduces stereotypes and the need to impose a highly demanding and controlling labour regime that requires a management workforce detached from local employees. As will be argued in this report, despite these prevailing perceptions, there is still quite a lot of variation across Chinese companies, so other factors may push some firms to localise faster than others despite these dominant narratives.

Localisation and skills training in Ethiopia's manufacturing sector

With these factors in mind, we turn now to the constraints on localising middle management in the Ethiopian manufacturing export sector. The existing literature has focused on skills mismatches, the supply and demand constraints in the provision of training, and mismatched expectations of new job entrants and employers. We draw on evidence from across the

Ethiopian manufacturing sector but give particular emphasis to studies examining the apparel export industry.

Skill mismatches

Skill mismatches, in particular where workers are overqualified for a position (in the sense of having a higher level of education than required), can lead to dissatisfaction on part of workers and hence to higher levels of turnover. Due in part to relatively high levels of graduate un- and underemployment, the Ethiopian labour market suffers from a range of issues in appropriately matching jobs and suitable applicants. Employers in Addis Ababa report that finding applicants with the correct skill set is a major challenge (Abebe et al., 2021). Drawing on various rounds of the Ethiopian employment and unemployment survey between 2003 and 2014 Beyene and Tekleselassie (2018) find evidence of widespread skills mismatches with formal overqualification the most common issue. The mismatch in skills adversely impacts Ethiopia's sectoral productivity, labour retention, and competitiveness.

Skill training

There is as yet too little evidence on the domains and types of tacit knowledge and skills required to tackle Ethiopia's skills mismatch and labour market failures (Yamada et al., 2018a). The Ethiopian government has attempted to improve the supply of industry-specific training and increased number of training institutions, including both universities offering specialised degrees and technical and vocational education and training institutes (TVETs). However, graduates of textile-related disciplines still suffer from high unemployment rates, which indicates that the skills supplied do not meet with employer demands (Yamada et al., 2018b).

This supply-demand mismatch brings into question the capabilities of Ethiopian university and TVET graduates to take over managerial roles in foreign companies. Wolter and Ryan (2011) argue that one of the causes of the mismatch between training and employers' expectations is the inability of TVET institutes and their curricula to keep up with the rapid pace of change in the economic environment and the consequent changes in demanded skills. Another, closely related, issue with developing basic capabilities is the poor quality of training provided by the TVET institutions. TVETs have historically struggled to attract and retain high-quality instructors, especially for higher-qualification courses, and privately-run TVETs, which have made up around a third of the sector, have a reputation for offering lower-quality training. These factors contribute to the mismatch between government targets, the private sectors' commercialised vocational training mechanism, and foreign investors' skills demands and expectations (Shaorshadze and Krishnan, 2012).

Training of local middle managers for Ethiopia's foreign-dominated export industries is further complicated by cultural differences and communication barriers, which lead to differences in expectations and can fuel mutual distrust between local and foreign managers (Tang, 2016; Fu et al., 2019). Although foreign managers frequently emphasise their willingness to train Ethiopian managers, complaints about skill levels persist (Schaefer and Oya, 2019; Fei, 2018). Evidence from the training of line managers and workers indicates that although workers agree that on-the-job training is beneficial, a majority were not satisfied by the level of training provided by foreign managers (Fei, 2018; Enterprise Partners, 2017; Barrett and Baumann-Pauly, 2019).

The level and quality of training provided appears to vary widely across factories, including in the apparel export sector. For instance, one study found that some foreign factories only offer training to one out of three new hires per year, whereas other firms provide training opportunities for all employees (Yamada et al., 2018b). Some firms appear to believe that management candidates who are TVET graduates should already possess the requisite skills and hence offer them less training (Fei, 2018). Barrett and Baumann-Pauly (2019) argue that some of the Hawassa Industrial Park's training programs demonstrate how short training periods, often just a few days of on-the-job training, are insufficient to change workers' ingrained personal habits and attitudes. Poorly trained Ethiopian managers are subsequently fired for having failed to solve problems. Barrett and Baumann-Pauly conclude that this inefficiency is a key reason for the inability of some of the park's factories to build organisational capabilities, including those needed to maintain industrial peace, leading to missed deadlines and delayed deliveries.

Mismatched expectations

Training employees will not contribute to durable firm-specific organisational capabilities if new hires leave shortly after training. Rapid turnover not only deprives workers and managers of the opportunity to absorb tacit knowledge but also means employees will take their skills with them. This makes managing turnover a key aspect of building organisational capabilities. A number of studies have suggested that in the Ethiopian context, and especially in the apparel export sector, high turnover is in part a result of mismatched expectations between senior managers and new employees. Senior managers expect, or at least hope for, skilled employees willing to work hard for the wages on offer, while new employees expect decent wages, a respectful working environment, and meaningful possibilities to progress their careers and improve their incomes. When these expectations clash or are not met, employees can become disgruntled and leave in search of better opportunities elsewhere.

In a study of 955 prospective factory workers in Hawassa and Dire Dawa, Halvorsen (2021) concludes that high rates of turnover are driven not only by low rates of pay, demanding work, and harsh factory discipline, but also by the gap between the realities of the factory and workers' expectations before starting their jobs. The sampled workers, mostly young women with no previous work experience, believed that the modern environs of Ethiopia's new industrial parks signified high wages and, by extension, the ability to live a desirable urban lifestyle. The situation was further exacerbated by incorrect information provided to them by government officers supporting the recruitment drives. When wages and working conditions failed to live up to expectations, many left.

In a review of the literature on turnover in the Ethiopian manufacturing sector with a focus on apparel, Fink et al. (2021) note that turnover appears to be driven by a lack of job satisfaction resulting from low wages and challenging working conditions, combined with familial safety nets and the possibility of finding alternative employment in the informal sector. They conclude that many firms have yet to develop the capabilities to bind workers to the factory by meeting wage expectations and using more supportive human resource management approaches. Similarly, in an evaluation of a large-scale donor-funded programme to ease the rural-urban transition of workers in the Hawassa Industrial Park by supplying sourcing, screening and basic training services alongside interventions aimed at improving human resource management, Hilton (2019) find that prospective workers were frequently not given realistic information about wage levels during the screening stage. While much of the available evidence on expectation mismatches in Ethiopian manufacturing deals with production workers rather than managers, we will show below that turnover resulting from unmet expectation is also an important constraint on developing skilled middle managers and the organisational capabilities they embody.

3. Context: the emerging exporting apparel sector in Ethiopia

While Ethiopia has a long history of both traditional and industrial apparel production, the contemporary apparel export sector is a recent development, with most firms having started operations in the country no earlier than 2014. The contemporary sector is distinguished from older forms of domestic apparel production by three key features: export is controlled by large foreign firms, most of the foreign export firms are tied into demanding transnational production networks serving consumer markets in high-income countries, and the industry is concentrated in a series of new industrial parks operated either by or in partnership with the Ethiopian government. This section will briefly review the development of the emerging apparel export sector, lay out some of the key features of the industry and examine the impact of the Covid-19 pandemic and the conflict between the federal government and the Tigray region in northern Ethiopia.

Apparel export production in Ethiopia had been pioneered by domestic firms but by 2015 the sector was increasingly dominated by foreign companies (Whitfield et al., 2020). The foreign domination of the Ethiopian apparel export sector is due to the superior technological and organisational capabilities of foreign firms, who generally are already successfully integrated into the global apparel sector by the time they invest in Ethiopia. Their direct experience of apparel production for end markets in the US and the EU has allowed these companies to build the production systems, staff skills, and managerial routines necessary to become internationally competitive. By contrast, according to Whitfield and Staritz (2021), most Ethiopian-owned apparel export firms lack the capabilities needed to break into demanding transnational production networks. They lag foreign export firms in the sophistication of both production processes and products and have much less knowledge of relevant end markets. In consequence, by 2017/18 domestic firms accounted for only about 15% of total apparel exports.

Ethiopia's comparative success in attracting foreign apparel firms linked into global value chains is closely related to its industrial strategy. While Ethiopian elites had originally envisioned a developmental path led by state-owned and quasi-state-owned firms, this position shifted over time and from 2005 on a realignment within the then-ruling EPRDF saw the government focus on attracting foreign direct investment through offering tax breaks, subsidies, and specialised industrial parks (Hauge and Schaefer, 2022). Foreign direct investment into the Ethiopian apparel sector began in 2008 with firms from Turkey seeking new low-cost production locations. While this first wave of investments was important in establishing Ethiopia as a supplier location, the vast majority of these firms had gone bankrupt or left the country by 2020 (Whitfield, Staritz, & Morris, 2020). Ethiopia's first industrial park, the Eastern Industrial Park, opened in 2009. The park was financed and operated by a private Chinese firm, but was built in close coordination with the Ethiopian government, which provided cheap access to land and promised low-cost labour to potential investors (Giannecchini & Taylor, 2018). This park became home to a wave of Chinese apparel firms. While some of these firms became large-scale exporters, others focused on supplying the Ethiopian domestic market (Chen 2021). The final wave of foreign investors, which largely still defines the sector today, began to arrive from 2014/15. Most of these firms were, or were hoping to become, suppliers to leading transnational apparel production networks, coordinated by buyers from the US and the EU. The vast majority already had production bases in other countries, most commonly in Asia (Oya & Schaefer, 2021). These firms are concentrated in a series of government-owned industrial parks, notably Bole Lemi on the outskirts of Addis Ababa and the Hawassa Industrial Park which began operating in 2015 and 2016, respectively. Inside of these parks, the Ethiopian government provides additional incentives, including improved access to logistics, more convenient access to government services, and serviced production facilities. In return, firms are expected to export the entirety of their production (Whitfield & Staritz, 2021).

A key concept behind the new industrial parks was to use leading suppliers or even lead firms already involved in successful transnational production networks as anchors for each park. This strategy drew in new supplier firms and helped facilitate access to international markets. Together the targeted government support and the high levels of capabilities already possessed by foreign firms investing in Ethiopia drove a rapid expansion of the apparel export sector (Schaefer & Oya, 2019). A key challenge was the recruitment and retention of sufficient numbers Ethiopian workers and managers. The limited development of the manufacturing sector in Ethiopia meant that relevant skills and experience were scare and training needs were high for new recruits. To help alleviate these challenges the government, foreign firms and international donors came together in a series of programmes and projects aimed at increasing both recruitment and providing basic training. The largest of these initiatives targeted the Hawassa Industrial Park, where recruitment was funnelled through a donor programme to support the sourcing and training of new workers. Potential workers were identified by local government bodies before being screened and provided with basic soft skills training in Hawassa. However, the impact of the programme on productivity is unclear (Hilton, 2019). Such difficulties notwithstanding, interviews with senior managers indicate that by 2019 the Ethiopian apparel export sector was beginning to stabilise both labour supply and turnover.

At that point the Ethiopian apparel sector was, like the global industry as a whole, heavily impacted by the Covid-19 pandemic. In 2020, large buyers collectively cancelled billions of dollars' worth of order from supplier firms across the world, leading to an international outcry and a concerted campaign by NGOs and trade unions to pressure buyers to pay their suppliers. International garment sales recovered partially in the second half of 2020, but buyers still pressured supplier firms to accept steep price reductions and even to fulfil orders at below production costs (Anner, 2022). While the Ethiopian government tried to support firms with payment holidays for taxes and protect workers with a temporary ban on lay-offs, the impacts on the sector were nonetheless severe.

We are able to trace the impact of the pandemic with relative precision thanks to a number of phone surveys conducted by World Bank researchers in collaboration with the Ethiopian government. A phone survey of firms in Ethiopian industrial parks conducted between May and August 2020 revealed that among export-oriented firms 68% reported a reduction in sales and 61% reported lower production. This was driven by a reduction in demand as well as higher prices for and constrained access to imported inputs (Mengistu et al., 2020). A large-scale phone survey of almost 3,900 workers at the Hawassa Industrial Park conducted between April and June 2020 showed that 41% of respondent who had been employed in January were no longer employed at the time of the survey. Moreover, the survey found that respondents had extremely low rates of savings, high rates of consumption expenditure compared to their incomes, and much higher rates of household food insecurity compared to pre-pandemic surveys (Meyer et al., 2021).

The impact of the pandemic was of course not confined to firms operating in industrial parks. A series of high-frequency phone surveys of 414 firms in Addis Ababa conducted between April and August 2020 reported severe reductions in real wages compared to April 2019. Real wages for high-skilled workers had fallen by 14.1%, while low-skilled workers reported a drop of 3.7% (Abebe et al., 2020b). By October 2020, 19% of a sample of 344 firms remained closed, though lay-offs had seemingly stabilised by that point (Abebe et al., 2020a)

The impact of the pandemic was further exacerbated by the outbreak of a vicious civil war between the federal government and forces in the Tigray regional state in northern Ethiopia in November 2020. The war almost immediately drew in other actors and regional militias, most notably from Amhara region, and the Eritrean military took part in the war on the side of the federal government. The war, which is ongoing at the time of writing, caused a huge loss of life, widespread sexual violence against women and girls, rampant hunger and devastation of civilian infrastructure. The war and its political consequences led to severe disruptions for the Ethiopian apparel export sector. The city of Mekelle, capital of the Tigray region, came under military assault, which lead to the closure of the Mekelle Industrial Park. A number of firms in and around the park were looted and/or destroyed (IndustiALL, 2021; Paul et al., 2020). The Kombolcha Industrial Park was closed when Tigrayan troops occupied the city, though some firms apparently resumed operations after these troops retreated in December 2021 (Ethiopia Monitor, 2022).

In response to the blockage of humanitarian aid to Tigray region the US government suspended Ethiopia's access to the African Growth and Opportunity Act (AGOA) in January 2022, which had granted exported based in the country duty-free access to the US and formed an important plank of the profitability calculations of many exporters (Reuters, 2022). In February 2022 the US Congress began considering bills that would prohibit most forms of financial assistance to Ethiopia (US Congress, 2022).

This context is important to keep in mind when we discuss our findings below. Before we turn to the results of our research, the next section gives an overview of how the research was conducted. Both the pandemic and conflict impacted the way in which the research was carried out.

4. Research design and process

The project adopted a qualitative research design complemented with a targeted collection of up-to-date quantitative data from different government sources. The team also conducted a number of scoping and targeted literature reviews through an interdisciplinary lens, to gauge key concepts, questions and debates relevant to the study. The priority was to combine these different sources of data to get a picture of the main factors shaping the employment of management workers in the emerging textile and apparel sector in Ethiopia, and the dynamics of building of an industrial management workforce serving the needs of globally integrated firms.

The study started with a selective literature review that focused on the development of capabilities, to document the evidence base on the interface between expatriate and local managers and the patterns of reliance on expatriate managers in relevant sectors. This literature review also served the purpose of exploring the nature and range of knowledge and organizational capabilities expected in globally integrated textile and apparel firms, in order to contextualise the needs and realities of foreign investors in the sector in Ethiopia.

The qualitative research component was the main source of evidence for the findings presented in this report, and consisted of 56 interviews distributed as follows (see also Table 1 below):

- Semi-structured interviews with Ethiopian middle-managers and senior expatriate managers in a sample of textile and apparel firms, located in the main industrial parks.
- Open interviews with firm general managers and other key informants in the relevant sectors, including people with extensive experience in the sector in Ethiopia.
- Semi-structured and open interviews with government officials from the most relevant government institutions (EIC, MoTI, MOSHE, IPDC). There were frequent conversations with officials at the Ethiopian Investment Commission (EIC), who contributed with important insights and facilitating access to valuable data on the industrial parks and training institutions.
- Semi-structured interviews with providers of qualifications and training for local management in the textile and apparel sector (AASTU, BDU, ETIDI)
- Direct observations on the factory floor

All interviews were transcribed and transcripts were coded thematically, using a combination of both predetermined and emergent codes. Our coding was iterative leading to lower-level codes being combined into themes during subsequent rounds of coding.

Table 1. Sample distribution of qualitative interviews

Interviewees	**N**	**Institutional breakdown**	**N**
Senior management	20	Firms sampled	20
Middle management	22	Government institutions	4
Government officials	6	Training institutions	3
Training institutions	3	International agencies	3
International agencies	3		
Other key informants	2		
Total	**56**		

Fieldwork for the qualitative research and database compilation had been planned in three phases, including travelling for face-to-face qualitative interviews by the principal investigator and co-investigator in 2020. Unfortunately, due to the restrictions associated with the COVID-19 pandemic these initial plans had to be revised and the data collection interrupted until face-to-face interviews were possible. The bulk of interviews and data collection was thus postponed to 2021 and the last interviews were finalised in September 2021. Additional checks and filling of information gaps was achieved in subsequent months ahead of the final qualitative data analysis. This was complemented with the final compilation of information obtained through the EIC on employment in foreign firms in industrial parks and relevant training institutions. These datasets were used to assess recent trends in the presence of expat management employees and the supply of relevant management graduates in the country. Up-to-date data until October 2021 were obtained from the EIC on the number of employees per firm and industrial park (including over 400 firms in the list). The breakdown of foreign-owned firms sampled for qualitative interviews of senior managers, was roughly consistent with the full list of foreign enterprises included in the EIC database, as shown in Table 2 below. Semi-structured interviews with managers in foreign-owned firms focused on three main themes: the recruitment of local management workers, and constraints therein; the retention of local management workers; and within-firm training and knowledge transfer mechanisms to upgrade the local management workforce.

Table 2. Breakdown of sampled firms by origin in EIC database and our sample

EIC database (423 firms)	%	IDCEA sample (20 firms)	%
China	59	China	50
India	10	India	22
Pakistan	3	Other Asian	28
Turkey	7	Other	6
Other (mostly Asian)	21		

The selection of firms and interviews was based on the following considerations: First, we targeted the main foreign-owned firms located in the Hawassa Industrial Park and Bole Lemi. We made sure to include the leading active foreign-owned firms of the sector, in terms of number of employees. Second, we selected a number of firms with longer experience in these parks, so that we could get a sense of trends since they set up operations and how they dealt with initial constraints over a period of time. Third, we included a range of origins of ownership among the sampled firms. We composed the sample trying to respect the observed proportions in the main EIC database of foreign investments in the textile and apparel sector (see Table 2). Thus, Chinese-owned firms accounted for 50% in our sample of senior management interviews, compared to nearly 60% in the EIC census. Fourth, we included a few examples of firms who had established operations more recently, after 2018, to gauge the extent to which they faced similar constraints compared to earlier investors. Fifth, we also had a significant group of firms that had also been part of the quantitative survey sample conducted in 2017-18, for which we had additional information that could be used to compare the situation then with the situation in 2021. Meanwhile, the selection of government institutions, training organisations and other agencies was based on our experience in the sector and advice from key informants, so we could focus on those organizations with a relevant remit in relation to Ethiopian management workers employed by foreign firms in textile and apparel.

5. Main findings

Management workforce localisation: drivers and barriers

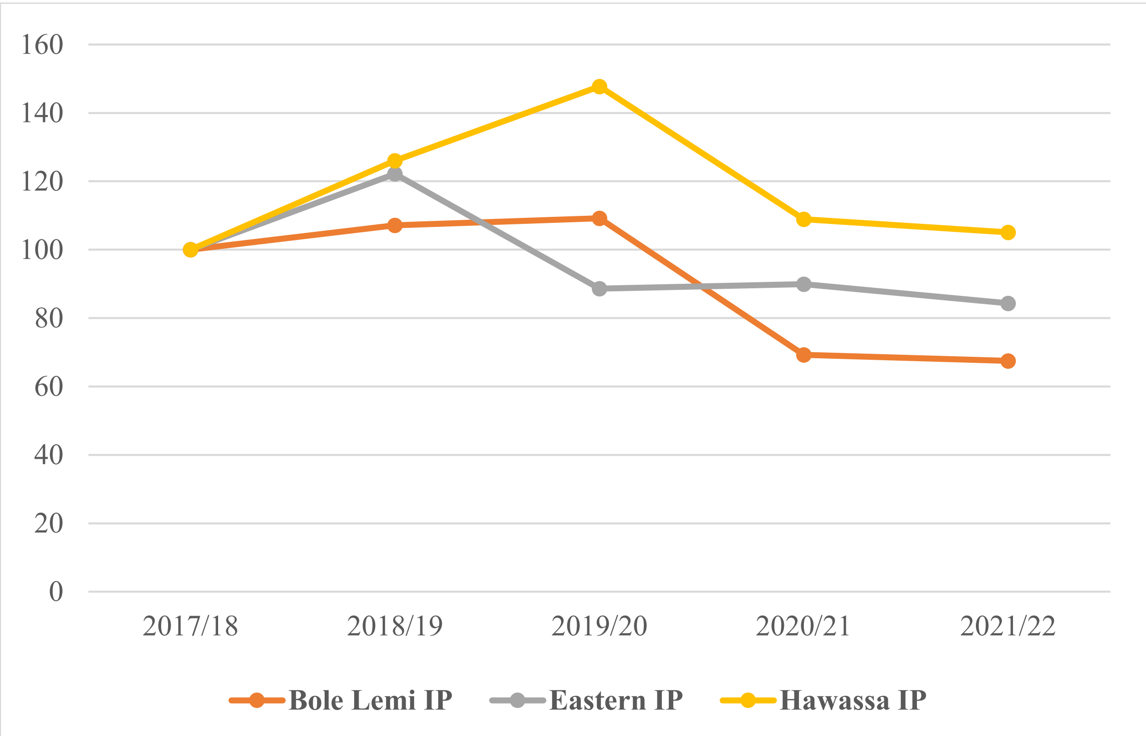
To what extent have new investing firms in the apparel sector localised their management workforce? What have been the main barriers and facilitators? These are some of the core questions of the project. We look at two sets of issues: First, we analysed the evidence on localisation, variation across firms, and data on the main barriers according to senior managers and other informants. Second, we examined the required skills for an export-oriented apparel factory and the extent to which Ethiopian candidates meet the requirements or not. We also show the kinds of positions that are easier to localise, and why, and the main impediments for more senior positions.

The main finding is that the localisation of the management workforce in new foreign-owned apparel factories has been slow but gradually improving since 2018, with some firms, especially larger and more globalised ones, advancing more rapidly than others. The nationality of the firm does not seem to produce a significant effect. Chinese-owned firms constitute the largest share of the sample, in line with the sector standards (Table 2). Figure 2 may suggest that, on average, the industrial park dominated by Chinese-owned firms (Eastern Industrial Park) had higher rates of expat employment (mainly managers) but trends are clearly downward over the period 2017-20, especially for this IP. There was also a lot of variation within the sample of Chinese-owned firms, with some having a substantial presence of Chinese managers at different levels, in contrast to some other firms where Ethiopians dominated the middle management and even reached senior positions. Some of these differences are idiosyncratic since neither firm age nor size seemed clearly correlated with these different degrees of management workforce localization in Chinese-owned firms. In any case, assessing localization trends has been made difficult by the short timeframe since most of these firms began operations in Ethiopia, and compounded by the disruptive impact of COVID-19 and the current conflict on employment levels in industrial parks. Most sampled firms started operations in 2017 or later and had to incorporate a workforce with limited experience in global production networks.

Overall, there was consensus among foreign senior managers that it was very difficult to find Ethiopian managers with a ready-made set of applicable skills, due to lack of practical experience. There was a consensus that *most* Ethiopian management candidates did not have the relevant experience and organizational capabilities when hired and had to be trained from rather low levels, especially to cope with the high-pressure work environment of global suppliers. Most of our sampled Ethiopian middle managers corroborated that job interviews focused heavily on issues such as commitment, communication skills (esp. in English), and the ability of candidates to deal with the expected workload and to function under stress. For senior managers, the work culture shock for inexperienced local managers was probably one of the reasons for high turnover in early stages. Only a minority of candidates who had more than three years of experience in similar factory environments would qualify as ideal candidates. Therefore, most firms reported that they had to ‘start from scratch’ by hiring fresh graduates without experience and training them from the basics (see section below), or simply using internal promotion of most skilled and performing production workers to work their way up towards line supervisors and beyond. The latter was more common in smaller firms, Chinese-owned companies, and family-run businesses, which particularly valued seniority within the firm and loyalty. Larger and more professionally-managed firms were more likely to demand a minimum of qualifications, recruit candidates through more organized hiring processes, and offer more structured training to get Ethiopian managers into positions of higher responsibility.

The evidence collected from EIC data and the sample of firms for this study suggests that in the past five years there has been some increase in localisation of the management workforce, but perhaps not with the pace expected in the early days when promises of knowledge transfer were bold and encouraging.

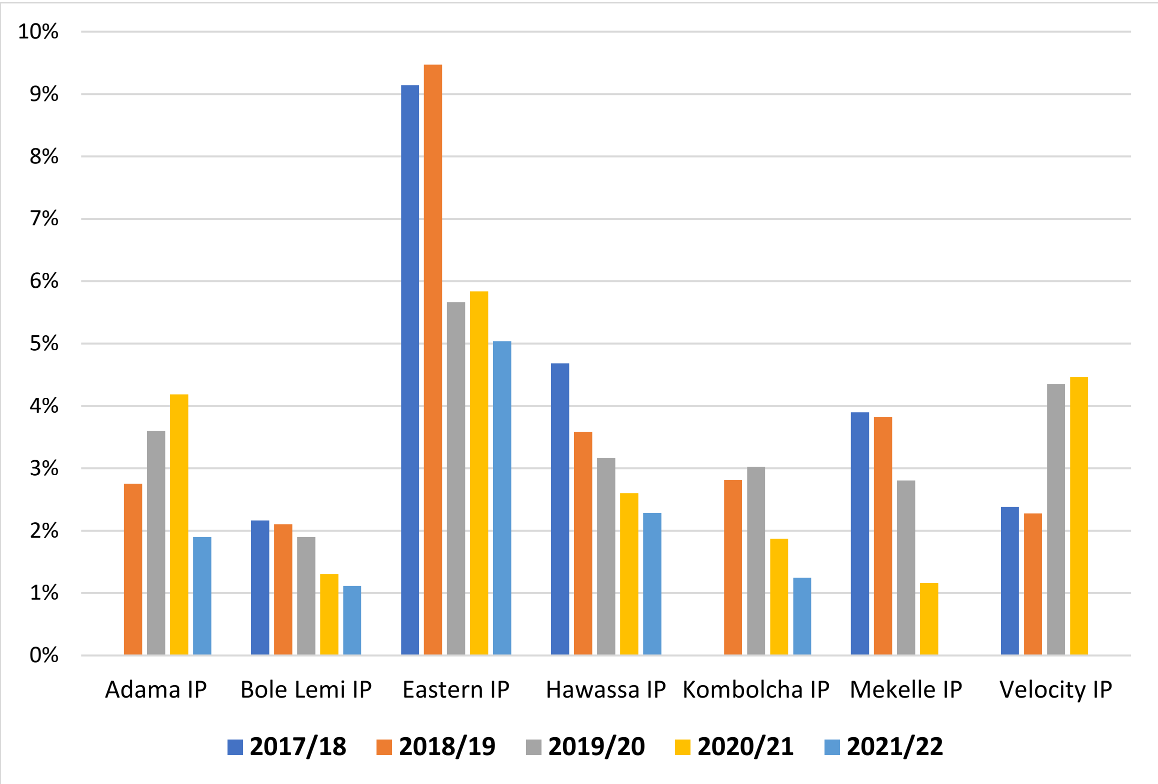
Figure 1. Index of expatriate workers in foreign T&G investments by industrial park, 2017-22 (2017=100)



Source: EIC database of foreign apparel investments. All listed and active firms considered. Averages per park.

Figure 1 shows the trends in foreign employees (of whom 60-70% are estimated to be managers, and others being machinery engineers or skilled workers generally) by industrial parks, starting with the 2017/18 base year (=100). In the three industrial parks highlighted in this chart, we see an initial increase, associated with the setting up of operations of many of the companies, followed by a significant drop in overall numbers since 2020-21 especially in Bole Lemi and Hawassa. It is clear that some of this reduction in the numbers of foreign managers at factory level was due to the COVID-19 pandemic, which led to several senior managers leaving the country. There was also an overall temporary reduction in total employment in many firms in 2020. In terms of share of total employment, Figure 2 shows a clearer reduction in almost all industrial parks, from higher levels recorded at the Eastern Industrial Park compared to other industrial parks. In most parks, the employment of foreign managers either stagnated or declined while overall employment of production workers increased. Some substitution effect in the management workforce can therefore be inferred.[1]

Figure 2. Proportion of expatriate workers in total employment by industrial park, 2017-2022



Source: EIC database of foreign apparel investments. All listed and active firms considered. Averages per park.

Table 3 presents a more granular picture for a subsample of the largest employers in the leading industrial parks. The trends for these companies are consistent with the aggregate

[1] The EIC datasets do not produce disaggregated statistics for local managers.

trends and confirm a relatively low share of expatriate employment in total employment in the three years under analysis, moving from 2.8% in 2019 to 1.9% in 2021. The table also shows significant variation across firms, but almost all firms saw a reduction of the share of expatriate workers in the workforce between 2019 and 2021. Two of the firms in the sample had a larger group or foreign managers, partly because they brought them to initiate operations at speed and engage in training of local managers in their first two years of employment. In these firms (D and I) the reduction in the share of expat workers was relatively fast.

Table 3. Employment of expatriate workers in top apparel firms

	Avg. number of expatriate workers			Share (%) of expatriates in total employment		
Firm	**2018/19**	**2019/20**	**2020/21**	**2018/19**	**2019/20**	**2020/21**
A	17	15	10	1.9%	1.5%	1.0%
B	58	66	68	1.4%	1.1%	1.0%
C	70	84	43	1.7%	1.8%	1.0%
D	126	38	18	5.6%	2.0%	2.7%
E	25	16	20	3.0%	2.2%	2.5%
F	47	66	18	1.7%	1.9%	1.9%
G	35	46	36	2.1%	2.4%	1.6%
H	64	60	39	3.1%	3.7%	2.5%
I	169	189	147	5.0%	3.6%	2.9%
J	53	72	41	2.4%	2.0%	2.1%
K	41	109	61	2.5%	2.7%	1.3%
Average	**64**	**69**	**46**	**2.8%**	**2.3%**	**1.9%**

Source: EIC database of foreign textile and apparel investments.

Note: "Top" firms were defined as the largest employers in the IPs for which there was a consistent series of trends for three years since 2018.

We collected more disaggregated data from a subsample of 16 firms among the 20 firms initially targeted in our research. Table 4 offers a distinction between different categories of employees, distinguishing between expatriate managers, expatriate technicians and local managers. This allows us to estimate the share of foreign workers in the management workforce, strictly defined. The expatriate workforce is dominated by managers (around two thirds), who represent on average 29% of the management workforce, or 21% if we consider company weights in total sample employment. There were just over 400 foreign managers in 16 firms employing a total of 34,000 workers, which represent a significant share of total apparel employment in the industrial parks under consideration and therefore statistically relevant.

On average, the ratio of foreign to Ethiopian managers was roughly 1:4, which is consistent with a management workforce distribution where foreign managers occupy all the main senior positions as well as some highly specialised middle management positions, and Ethiopian employees fill all the other management jobs. According to most senior managers we interviewed, the currently estimated shares of local managers in the total management workforce were substantially higher than in the early days of operations in 2016-17. There is, however, some variation across firms, as show in Figure 3. Four of the sampled firms had shares of foreign managers exceeding or close to 40%, whereas at least five firms had less than 20%. Although Chinese-owned firms seemed overrepresented among those with the highest shares, as noted before, there was also a lot of variation among Chinese-owned firms, as two of the companies with the lowest proportions of foreign managers were also Chinese. Several managers explained that several senior management positions and some middle-level jobs required Chinese employees because of language barriers. The use of machinery, equipment and operating systems in Mandarin meant Ethiopian workers could not take jobs that required a frequent use of such equipment and systems. Technical language proficiency was required and training new Ethiopian workers would take years for them to be able to manage them at ease and efficiently.

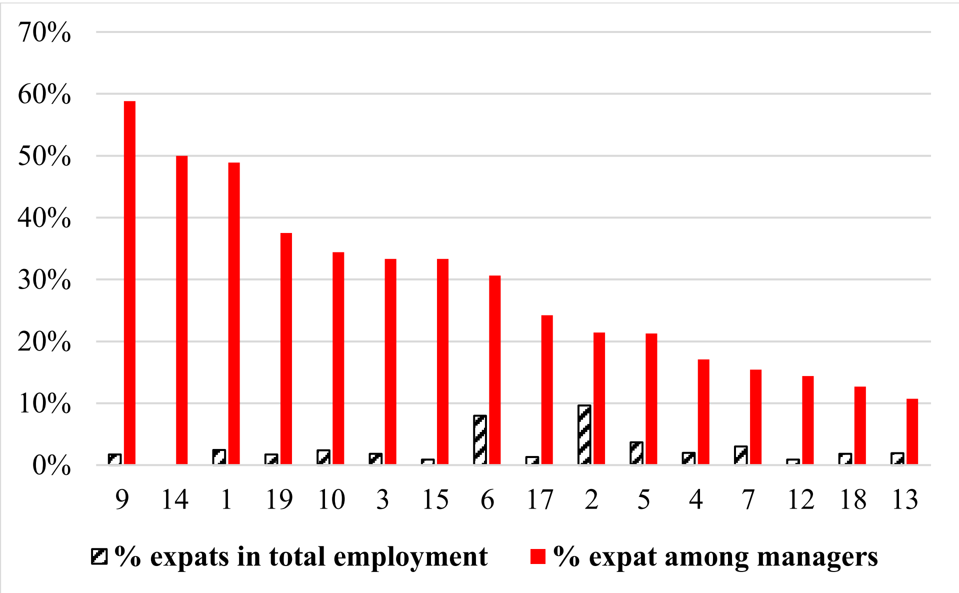
Despite these barriers, there was a general acknowledgement that localising middle-level positions was extremely important for the firm for two main reasons. First, these positions were accessible to Ethiopian employees with limited experience, as they could perform their roles effectively in a relatively short period of time as long as initial training was effective. Second, given communication barriers and work culture clashes in the factory floor, having Ethiopian middle managers and line supervisors was seen as crucial for the day-to-day management and communication with production workers. Senior managers perceived a clear advantage in keeping Ethiopians in these management positions given that labour conflicts and miscommunication could be averted more easily. In light of the frequency of strikes in the period 2017-19 (Oya and Schaefer 2021). Ethiopian managers provided an effective 'buffer' between demanding senior management and relatively inexperienced production workers. Therefore, much of the progress achieved in terms of workforce localization since 2017 was due to the filling of these positions by local employees, even if the pace was not as fast as desired.

Table 4. Distribution of expatriate employees by firm: IDCEA sample

Category	Average per firm	Total sample sum
Expatriate managers	26	412
Expatriate technicians	14	217
Total expatriate workers	35	629
Local managers	100	1,594
Total managers	117	1,991
Total workers	1,897	34,139
Share (%) expatriate workers in total employment	3%	2%
Share (%) expatriate workers among managers	29%	21%
Expatriate managers as share (%) of expatriate workers	62%	66%

Source: IDCEA sample for 16 leading firms.

Figure 3. Expatriate management presence in IDCEA sample firms



Source: IDCEA sample for 16 leading firms.

Note: Numbers on x-axis refer to ID number of firm in the IDCEA sample. This is to distinguish from the letters used to anonymise individual firms extracted from the EIC database in Table 3.

There were different reasons for the relatively slow pace of localisation across all management positions. Most respondents identified two key barriers: a lack of technical expertise and experience with evolving machinery and production processes, combined with a perceived lack of trust and loyalty to the firm. This high expectation on the part of foreign managers created a 'ceiling' for most Ethiopian managers, who could only aspire to middle-level positions and were forced to let expatriate managers retain the senior roles, especially those in finance, liaison with customers and HQ, and overall production management. On the technical and organizational front, one barrier is the lack of familiarity with the whole apparel chain and its international dimensions. This means local managers know only specific parts of the chain and production process at best. Most Ethiopian middle managers in our sample had technical expertise in engineering-related tasks and import-export processing positions. As a result, expatriate managers tend dominate all top-level positions: General Manager (GM), Cutting Manager, Operation Manager, RM (Raw Materials) Manager, FG (Finish Goods) Department Head, Finance Manager, Commercial and Logistics Manager, Quality Manager, Compliance Manger, and Engineering Department Head. A senior manager of one of the top suppliers in the Hawassa Industrial Park noted the segmentation of the management workforce, whereby some positions are 'reserved' for expatriate managers: "[there is] concentration of local staff in human resource and production process management roles while major managerial roles in finance, operation, and engineering are held by expats." (CM7). In the words of a senior manager at a Chinese firm: "It is difficult, particularly for exporting companies. Firstly, the production network is not complete in Ethiopia. Most companies produce semi-finished products and you cannot find a complete industrial chain. So, the managers you find here only know part of the chain, and they would know very little about the upstream and downstream production (suppliers and the next-step manufacturers)." (CM4). Another Asian manager noted "since the [apparel export] industry is new to the country it is quite difficult to find people with qualifications specific to the garment industry" (CM12). In fact, many foreign managers reported that it would take at least five years for a local manager to assume a senior management role, just on the grounds of tested organizational capability. There is, however, some variation, and a number of firms have upgrading and promotion systems in place to gradually place more local managers in some of these higher-level positions, especially in production management roles.

The other main reasons why certain senior management roles (finance, commercial department) are often reserved to foreign managers were 'trust' and information confidentiality on the part of owners and top company managers. This is not an unusual feature across countries, especially in family-run businesses with less international experience, where relatives and close associates tend to be overrepresented in top senior management positions. This is particularly the case in firms of Asian origin. In the words of a GM: "the company would have concerns about delegating all management power to local managers, as there is still trust issue and there are worries that the Ethiopian managers might harm the company's interests" (CM3). This perception was known to Ethiopian middle-managers who often felt excluded from high-level decisions and were not sufficiently empowered to decide independently within their spheres of work. In labour process theory the segmentation of the workforce, in this case the management workforce, along national origin lines and proximity to owners, acts as a form of labour control mechanism. What some foreign managers offer is a tighter grip on the factory workforce by controlling key decisions and imposing arrangements that they might not expect local managers to enforce as forcefully. As long as the local manager is not entrusted to exercise labour control mechanisms on behalf of owners, the segmentation may be reproduced over time despite training and technical upgrading of local managers.

The reluctance to promote local managers to the positions of highest responsibility contrasted with a view articulated by a number of foreign managers with longer tenure in Ethiopia's factories that having more Ethiopians in top positions would probably have a beneficial impact also on the levels of localisation in other lower management roles. This was also a view shared by more experienced Ethiopian middle managers who aspire to get to those positions of higher responsibility. This implies that, in some firms, the reproduction of a particular distribution of management roles can be path dependent and reflect preferences on the part of more powerful (expatriate) managers to work with other expatriate managers of similar origin, or to bring their trusted co-workers from factories in other countries (CM14). A senior Ethiopian manager who had managed to climb the management ladder confirmed that leading by example matters more than promises, so the presence of an Ethiopian manager in a senior management position makes the upgrading process for local middle-managers more credible and effective (CM20).

An additional barrier to localisation, according to most senior managers, is turnover: some of the local managers leave the company after they receive substantial training, forcing the company to start all over again. This can disincentivise training and upgrading to higher level positions, where turnover could be more damaging. The main risk is a vicious circle between turnover and reduced efforts to localise the management workforce, which in turn push Ethiopian managers to seek opportunities elsewhere. Generally, firms reported that turnover was not a significant problem for the running of the factory if it affected mainly basic middle-management positions, since there were always available and trainable candidates for such basic roles. Turnover was compounded, in the eyes of some foreign managers, by the constraints associated with the location of their factories. In a context of limited pool of high-quality local managers, factories located far from Addis Ababa or centres with adequate infrastructure, internet connection, and other amenities are less likely to attract the best candidates, who will tend to find jobs in or near Addis Ababa. A GM of a major firm in Hawassa Industrial Park confirmed: "There is … a problem in attracting higher level managers to the newly established industrial parks. This is partly related to the absence of facilities that are comparable to the big cities like Addis Ababa" (CM17). We return to the role of turnover in more detail in the next section.

Finally, several respondents especially among Ethiopian middle managers and some government officials, argued that a lax management of the work visa issuance and renewal processes may have led to a perpetuation of expatriate manager roles in many firms. The directive on work visa, approved in 2021, implies that companies must justify the application or renewal of a work permit for an expat managers by showing that no suitable candidate could be found despite evidence of training of local management employees at the firm.[2] The application form includes a question on "time schedule and training program designed for replacing the expatriate by Ethiopian, concerning posts other than higher management position and temporary assignment" (exhibit), which entails two things. First, the company needs to provide evidence of the training programme being completed to approve any potential future renewal. Second, higher management positions seem 'shielded' from this form of control, basically allowing companies to preserve the top positions for expatriate workers if they wish to do so. The Directive further states that "[t]he work permit of top management members shall be issued and renewed annually based on request submitted by the employer without the need for complying with preconditions set for other expats - particularly in relation to positions that can be filled by Ethiopians and duties pertaining to knowledge and skill transfer", making explicit that other non-exempt management positions are to be monitored in terms of skill transfer for localisation. According to this Directive, the EIC may grant work visas for expatriate employees "if the enterprise covers a third of its management members by Ethiopians." At the time of our research, on average firms did comply with this condition, as we estimated that 29% of management workers were foreign in our sample of 20 leading firms, and 21% if we combine the employment of all these firms

[2] The Directive Number 772/2021 "A Directive Regulating the Issuance of Work Permit to Expats Employed in Investments and the Implementation of Knowledge and Skill Transfer from Expats to Ethiopians", December 2021.

(since larger firms had a higher share of Ethiopian managers – see also Table 4 and Figure 3). This is just a preliminary first order condition, but other conditions apply, which ought to make the hiring of expat managers harder. For example, another condition set out by the Directive is of more significance: the need for “proof evidencing employment of Ethiopian replacement and assignment – to be operationalized after hiring the expat”. This means that any renewal should demonstrate that the Ethiopian ‘replacement’ still requires further training before assuming that management role in full. The relatively undemanding conditions and the perceived laxed attitude to enforcement of the Directive also reflect reluctance to antagonise foreign investors on matters of employment of management staff given the situation of the sector and the risk of companies leaving the country if this adds to other challenges they have been facing in recent years. A blanket enforcement of the Directive without a reasoned consideration of particular circumstances could therefore also carry risks for the sector. Achieving a balance between evidence-based effective enforcement of workforce localization and encouragement of investors in the sector is an important challenge that should be confronted.

Retaining local managers

We turn now to the closely related issues of turnover and retention. We begin with a general exposition of the turnover problem, before exploring more concrete drivers of turnover in the Ethiopian apparel export sector. From here we turn to the activities firm undertake to increase retention and discuss the role of salaries and other incentives, professional autonomy, and career progression. As before, we draw on the perspectives of Ethiopian middle managers, foreign senior managers, and experts in international organisations.

Turnover refers to employees leaving their jobs, either for a position with a rival company in the same sector, or to pursue opportunities in other sectors, while retention covers the efforts made by companies to slow the outflow of trained staff. The turnover problem arises from a mismatch between the interests of firms and employees. Firms require effective middle managers to achieve and maintain the efficiency level mandated by the fierce competition among supplier companies tied into transnational apparel production networks. All apparel export firms in Ethiopia therefore invest both time and money into training both production line workers and middle managers. Senior managers have an interest in seeing returns on these investments, meaning that they want trained and skilled staff to keep working for the company even as these employees develop increasingly scarce and valuable skill sets. Employees on the other hand want to maximise their earnings and do so in a working environment in which they feel valued and able to cope with the levels of pressure they are expected to withstand in a fast-paced low-margin sector with minimal scope for error.

Turnover

Turnover is a normal feature of any workplace but becomes a challenge for firms if the costs of finding and training replacement staff exceed what the company management is willing (or able, given competition and pressure from buyers) to invest. These costs include not only the funds and staff time necessary for training, both formal and informal, but also the losses in productivity that occur when skilled managerial staff leave and have to be replaced with less experienced employees who – initially at least – are likely to be less effective. Firms must therefore balance the costs of retaining existing staff, in the form of higher salaries and other incentive systems, against the expenses incurred in searching and inducting new managers and production workers.

Rates of turnover were very high during the setup phases of firms newly arriving in the current generation of industrial parks and senior company managers generally considered these levels to be excessive (Oya and Schaefer, 2021). However, the COVID-19 pandemic and the current conflict in Ethiopia notwithstanding, most apparel export firms have since operated in Ethiopia for a number of years and have been able to adapt to local labour market conditions (Abebe et al. 2020a). Senior managers perceive current turnover levels to still be comparatively high by international standards, but much lower than during the initial phases of operation (CM10, CM12, CM13). Most of the senior managers we interviewed therefore no longer regarded turnover as a key challenge, especially in relation to management employees. The main reason for this was the high level of graduate unemployment in Ethiopia, which meant that exiting middle managers could be replaced with comparative ease. The impact of this loose labour market was heightened by the fact that training periods for new middle managers are comparatively short, usually just three to four weeks from hiring until full operative deployment.

These general trends do not, however, apply equally to all companies. Responses from both foreign senior managers and Ethiopian middle managers indicate high levels of heterogeneity across firms regarding levels of turnover. While middle managers in most firms in the sample perceive turnover levels to be high, some respondents report low levels of turnover and even struggle to recall recent examples of colleagues departing, indicating that individual firms can differ greatly. The findings are echoed by senior managers. While, as discussed most senior leaders do not view current turnover rates as especially damaging to their companies' performance, some firms do suffer from higher rates of turnover. Similarly, as already indicated above, rates of turnover are not stable over time. Even in high-turnover firms, senior managers emphasise that job leavers are mostly middle-level managers and staff in positions just above line supervisors with relatively short tenure in the firm (CM3, CM17). It appears that, across almost all firms, turnover drops off sharply once staff have become accustomed to prevailing working conditions. Staff that find those working conditions too onerous, or do not feel that their pay provides adequate recompense, tend to leave the company quite soon after starting (CM11). Some senior managers regarded this attrition as normal in early stages of operation and not necessarily bad for the firm if that meant finding local managers that were more committed to the job (CM10, CM18).

There is broad agreement among both senior and middle managers on the key causes of turnover. Foreign senior managers report that middle managers tend to leave to search for alternative employment with higher salaries, to seek better opportunities in terms of their role and career progression, or to find work environments with less intense pressure. In addition, excessive workloads and clashes of work culture can also lead to middle managers departing (CM17, MM18, OT04). This assessment is broadly shared among Ethiopian middle managers. Middle managers typically express a lot of understanding for people who leave after receiving training to find better opportunities elsewhere and emphasise that many middle managers leave when expectations with regard to pay levels and especially salary increases are not met (MM5, MM13).

As noted above, high turnover may also act as a disincentive to train and promote local middle managers, given the opportunity costs involved in a high-pressure working environment. This raises the question about the alleged preference to hire inexperienced workers and train them on the job. Although many senior managers reported that companies often preferred to hire fresh graduates and train them in-house, as a way of 'moulding' their management workforce to the corporate culture of the firm and their particular needs (CM18), interviews with Ethiopian middle managers suggested that most were hired with some experience, especially work experience in similar enterprises (MM11). This contrast of perspectives may simply reflect the fact that after five to eight years of operations for many of the sampled companies, there has been a gradual move towards hiring local managers with acquired experience. This was probably not easy in the early stages, when the pool of available managers had very limited experience and most companies were starting operations in industrial parks. Therefore, in the last two years, it has become easier for companies to find local managers with suitable experience, leading the most experienced and skilled Ethiopian managers to frequently switch employer. This phenomenon indicates that turnover remains an important issue that requires some attention, particularly for in-demand local managers, despite reports from foreign senior managers that turnover was no longer very significant. More robust quantitative data on the turnover of local managers for different management positions would be highly valuable to shed more light on the extent of the phenomenon and how it affects different firms with different characteristics.

There is no doubt that firms that lose experienced and qualified managers to competitors lose a lot, even if they do not find it difficult to recruit replacements, as they reported. From the perspective of local managers switching employers, the chief reason, as discussed in the following section, is the search for higher salaries, career progression and recognition of their skills and value. Sometimes the first job appears to operate as a springboard for Ethiopian middle managers to acquire key skills and capabilities that are easily transferable to similar jobs within the sector. Several Ethiopian middle managers also aspired to assume more decision-making responsibilities, which were sometimes blocked by the excessive control over all operational decisions exercised by foreign managers (CM20). In fact, several Ethiopian managers complained that some foreign colleagues barely tried to teach them new organizational and production management skills especially if they saw competent local middle managers as a threat to their own tenure in the firm. Their loyalty or family links to the owners also played a role in disincentivising their willingness to be replaced by Ethiopian colleagues.

Retention

While, as discussed, most senior managers do not regard staff turnover to be a major problem, retention is still a key priority for most firms. Recruiting and training new staff is costly and losing experienced and skilled middle managers has the potential to impact productivity at least in the short run, which can be very costly in an industry based on short turnaround times for orders and high pressure from buyers to meet demanding targets. Senior managers consider losing valuable staff members to direct competitors especially damaging (CM14, CM15, CM20). All sampled firms therefore employ a number of strategies to try to retain middle managers. The most common strategies are standard tools of human resource management: direct financial incentives and measures to increase employees' intrinsic motivation.

Financial incentives include both annual salary increments, which are common across all firms, and performance/loyalty bonuses. Some level of increment is necessary to maintain the value of real wages in the face of high and variable inflation. However, middle managers in some firms reported that annual salary increases had not kept pace with inflation in recent years, perhaps due to the high rates of inflation Ethiopia has experienced for several years and exacerbated by the disruptions to production and supply caused by both the Covid-19 pandemic and the ongoing conflict (MM12, MM17). In many companies salaries can be further increased through performance-related pay. Most companies operate a system of bonus payments and offer allowances to cover costs such as food and transport to and from the factory. In addition to annual salary increments many firms use regular promotions as a means of increasing pay packages, sometimes by substantial amounts, and of giving management employees greater decision-making power and therefore a greater sense of control at work. Some companies also try to foster a sense of loyalty and shared interests by including middle managers in discussions on company strategy and making sure that managers feel their contributions are valued and their decisions are respected by senior managers (CM9, CM11). Many middle managers who were content with their current positions cited professional autonomy and control over their work as important factors (MM5, MM9, MM22). However, from the perspective of middle managers such non-pecuniary efforts were not always perceived as structured programmes to increase loyalty and retention and many middle managers therefore reported that their employers made no special efforts to retain workers beyond salary increases and promotions.

A major factor impeding the effectiveness of such measures is a substantial divergence in expectations between foreign senior managers and Ethiopian middle managers. By far the most common complaint among middle managers was about the level of salary, which many see as too low given their skills and experience. Many middle managers also either expressed frustration at not being promoted rapidly enough, or spoke of colleagues who left after being denied a promotion. As discussed above, senior management positions are effectively monopolised by foreigners in most firms, which limits the career possibilities of Ethiopian managers. By contrast, many senior managers reported that Ethiopian management recruits often have unrealistic notions of what constitutes an appropriate salary and how quickly career progression should happen. From the perspective of senior managers, the apparel export sector is a low-margin environment in which promotions happen slowly and are based on demonstrated skill and contributions to profitability. Ethiopian middle managers are therefore seen as impatient while often lacking the practical skills senior managers expect for higher-level positions. In sum, the divergence in expectations remains an obstacle to staff retention.

Learning to manage the factory floor: training on the job

As shown in our discussion of drivers and barriers to management workforce localisation, an important constraint on localisation is the perception by company owners and senior managers that Ethiopian candidates did not yet have the skills and experience to smoothly slot into new jobs under the high pressure of global supply chains. A common response to this challenge are the companies' own training systems. Therefore, this section focuses on the training processes at factory level: why and how firms train and with what outcomes, for the company and the managers. The section is structured into the key emerging themes, namely: the main training mechanisms and their frequency; the aims of training; questions of work culture and the importance of unlearning 'bad habits'; main challenges and tensions; and lastly, the most important learning outcomes for Ethiopian managers.

Incidence of training and main training mechanisms

Generally, all firms report conducting some training for Ethiopian management employees but there is significant variation about the extent and mechanisms adopted along a spectrum that goes from very minimal on the job practical training to a structured combination of formal in-house training, HQ visits, and informal on the-job training/mentoring. There is some pattern in this variation. The more structured combination of different modalities of training is mostly common across the biggest and most internationalised firms, i.e. firms with substantial international experience across more than one country. However, even among these firms, the degree to which *formal* training mechanisms are used varies. The majority of such firms include formal training only in the early stages after hiring, including a basic induction programme and corporate culture acclimatation. Some firms have a more structured and gradual training process such as a well organised induction programme, followed by technical training tailored to specific positions that incorporates a process of tuition and assessment and is linked to gradual internal promotion. A few firms also introduced Kaizen systems as part of their formal and on-the-job training, but this practice was far from widespread in the sector. However, the majority of firms, and especially the smaller and family-run manufacturers, opted for more informal mechanisms of on-the-job training with mentoring, where experienced workers mentor their assistants until they acquire the codified and tacit knowledge needed to run operations independently. As one GM who was against ‘excessively’ formal training put it: “We believe that the factory is a factory, not a school” (CM13). Another senior manager in a medium-sized family-run factory noted that informal training was effective but carried costs since “to get hands-on experience for workers the company will bear the cost of mistakes made by them when they are learning” (CM1). Informal training is, in fact, a long gradual process that hinges on the commitment of those who are supposed to mentor new employees. When mentors are expatriates who want to stay in their jobs, their incentives may lead to less effort to mentor. This is encapsulated in the following quote by a Chinese GM:

“There are two kinds of expat managers. One kind doesn’t want to stay in Ethiopia for a long time and wants to go back to his country as quick as possible, so these workers would try very hard to teach the Ethiopians. Another type likes to stay in Ethiopia and makes more money, so for them, they wouldn’t want to teach all they know to Ethiopian managers as they are worried that they will lose their job one day. As the saying goes, ‘when the apprentices have learnt all the skills, the masters will be starved’ (CM4). This has clear implications for questions of management workforce localization and retention, as discussed in previous sections.

Aims of training

There was an overwhelming consensus among foreign senior managers that one of the main aims of training Ethiopian managers is to advance in the localisation of the management workforce, particularly to make sure that all middle-management positions and some of the senior jobs are filled by Ethiopian employees. A further aim is to ensure that recruited Ethiopian managers at different levels contribute to the pressing efficiency and production goals of the firm, in as short a timeframe as possible. There is recognition that, for certain key roles held by expatriate managers, Ethiopian employees will require training for at least five years if not longer, but generally most middle-level positions can be localised faster if training works and trainees remain with the firm. A key issue is learning the whole production workflow, thus being able to identify key bottlenecks and disruptions in the process fast and having the tools and experience to troubleshoot against the clock. As one GM noted: “everyday on-the-job training takes place, with a mentoring system, focusing on learning the entire workflow, e.g. perform and learn every part of the work process to produce a particular product, let’s say a jacket” (CM18). In some cases, improving communication was also mentioned as an important objective. One Chinese manager commenting on organised trips to the company HQ in China said: “we aim to improve the learning of basic Chinese communication in factory environments, and understand the workflow in a competitive environment in China" (CM3).

Two additional specific objectives of training were to imbue new managers with the required work culture at the firm, and to make sure they unlearned 'bad habits' resulting either from limited experience or from previous jobs that did not feature the kind of work environment found in factories operating in global supply chains. These two aspects are discussed below.

Work culture and unlearning 'bad habits'

Although most senior managers stressed the importance of sharing a corporate work culture at the factory floor, and the key role played by middle-managers in that respect, there was some difference in views on the need to 'teach' the corporate culture of the firm and make sure local managers learned and adopted it. Some firms found it hard to transmit their corporate culture but insisted on this being necessary for managers' progression in the company. Other firms preferred to reach a balance and allow local managers to introduce aspects of their own work culture into the managerial practices of the company, particularly in terms of communication with production workers. This was deemed as veery effective by some firms, which aimed to create a hybrid culture, with some traits from the firm's work culture in its country of origin, and some adaptation brought about by the incorporation of local managers. As one senior manager put it: "At the beginning of our operation, we tried to impose the company's work culture [teamwork, cooperation, mutual respect and work geared towards higher efficiency and quality] that we had overseas. But that did not work out. So, we have now integrated the local culture with our corporate culture" (CM16). Therefore, bringing together the best elements of different work cultures appears a fruitful method to boost productivity and quality within the Ethiopian industrial context, while respecting the basic organizational 'norms' of a globally competitive garment supplier.

Training is also important to unlearn 'bad habits' such as when previous experience or work cultures are not relevant to the prevailing work culture of the company. The main viewpoint was the notion that the disadvantage with managers who come with some experience in Ethiopian companies is that they do not necessarily come with the work ethic and attitude that new investors expect. Firms adopting Kaizen training and management systems used these mechanisms to inculcate the culture of continuous improvement and the basic Kaizen principles as a way of unlearning 'bad habits' and promote consistent labour productivity improvements.[3] It was also argued that the salary expectations of some local managers coming from domestic firms are not in tune with their skills and experience and that raises potentially more trouble for the companies than fresh graduates with no experience. The lack of adaptability to a very stressful and competitive environment like the garment industry, where time management is critical, may therefore not be suitable to Ethiopians with good qualifications but used to less high-pressure work environments, i.e. in domestic firms or non-traded sectors, such as finance or other services.

Training challenges and problems

The three main challenges with regard to training that emerged from interview were the time it takes to train new staff, the cost of such training, and the incentives facing existing managers. The most important challenge is the limited time available for training compared to training needs and, in some cases, the time lost because of local managers leaving the company. As discussed, local managers' turnover was not generally found to be a significant obstacle for most companies, but some firms reported that managers being 'poached' by other firms meant important sunk training costs for them. However, there is consensus among senior managers that it is very difficult if not impossible to transfer the knowledge and skills gained from 20 years of work experience within 3 years, which is what the work permit visa system expects. For some companies, only a fraction of trainees make it to the desired positions or stay in the company, which means significant costs if a lot of training has been provided. In relation to the sunk costs associated with training, a GM noted: "The additional cost of having to hire beginners and having to train them is huge. We have so far hired 26,000 people just to maintain the 8,000 employees we need, at a huge cost to the firm" (CM10).

High training costs are an especially severe issue for companies that have a more structured training programmes, including in-factory formal training and periodic HQ visits. Firms that organised HQ visits reported mixed outcomes, as the costs of the visits were high, while the proportion of managers finally staying in the firm was often underwhelming from the perspective of senior management. In addition, there are some unintended consequences worth considering. For example, one GM reflected on these unintended effects of HQ training visits: "We had one HQ visit in 2017. We sent around 10 to 15 local managers to our parent company in country X. Contrary to our expectation, these people came to know the

[3] See Atta-Ankomah et al (2022) for a recent assessment of Kaizen implementation in Ghana's manufacturing firms.

salary scale in country X and started to compare their salary with their expat counterparts after they came back. As a result, they demanded a higher salary scale and none of them are currently working with us. Because of this bad experience, we never had another HQ visit since then." (CM18).

Another problem, already touched on above, is that expatriate managers may not have the incentives to train local managers as they may not want to be replaced. Sometimes this is due to individuals expatriate managers' preferences. In other cases senior managers and owners may prefer to 'reserve' certain positions for trusted expatriate managers, i.e. people who have worked for the firm for a long time and can be trusted with critical and confidential information, or indeed with a tighter grip on the basic labour control mechanisms of the company. The issue of 'trust' which arises as a key barrier to localisation, as discussed above, also affects incentives to training and its effects on promotion to roles of greater responsibility. This may create a vicious cycle if Ethiopian trainees feel that their efforts in training may not be rewarded with higher responsibility and progression within the factory, and therefore they invest less energy and time in their own upgrading. The interviews did not suggest this vicious cycle was widespread, but it was certainly an issue often raised by both senior foreign and Ethiopian managers.

Effects of training on managers' skills and capabilities

Despite these reported challenges and tensions in factory training systems, all companies reported important progress in terms of the skills and organizational capabilities acquired by Ethiopian managers after a few years in their factories. The main skills include a range of technical and organizational capabilities that are critical for the functioning of an apparel factory operating in global production networks:

- troubleshooting production line breaks/bottlenecks
- independent decision making
- work follow-up
- time management skills
- how to plan-do-check-act (PDCA)
- Kaizen principles for continuous improvement
- marketing, i.e. liaising with international buyers
- production, in the sense of managing whole production process

- how to manage a bulky workforce
- contribute to a less conflictive work environment and manage labour conflicts
- the ability to communicate with other company offices overseas

A senior manager aptly summarised the positive outcomes of in-house factory training and the time it takes to achieve them as follows:

"Ethiopian managers have acquired a lot of new skills through the intensive mentoring and continuous promotion mechanism of the company. We now have Ethiopian Deputy General Managers, department heads, quality managers, production managers, section heads, senior technicians, CAD CAM operators, PPC heads, merchandize managers. These positions were once held 100% by expats and now about 90% are held by Ethiopians. It generally takes four to five years work on average to get these positions" (CM9).

There was consensus that two areas where more time was needed to achieve further localisation of the management workforce were: marketing and customer management, and production. Marketing requires managers to be able to effectively liaise with international buyers and other market participants. To become a senior manager in charge of production management employees must be able to manage the whole production process and just not parts of it. This means having a holistic view of factory operations with all the organizational capabilities required to understand the links between different processes in the factory.

The next section attempts to offer an overview and assessment of how existing training systems in the Ethiopian education sector contribute to the formation of skills and knowledge relevant to the global suppliers investing in Ethiopia's apparel sector. This assessment offers the background necessary to understand the need for in-house factory training that has been analysed in this section.

Ethiopian training systems to support industrial management workforce

The importance of training on the job partly reflects the fact that Ethiopian graduates do not start their jobs with sufficient skills and capabilities acquired in the national training systems. This section explores the expectations, realities, and prospects of Ethiopia's training systems for the reproduction of a local managerial force to fill the roles in the emerging apparel sector. We contrast the views from company senior management, mostly expatriates, government institutions, and representatives of training institutions. An important question is whether the current curriculum and training modalities match the sector's required codified and tacit knowledge. This section is structured as follows. First, we provide a brief overview of the relevant training systems and the main sources of graduates for management jobs in apparel firms. Second, we discuss the articulation and linkages between training providers and firms recruiting management labour. Third, we summarise the main challenges and problems that hinder the availability of a more suitable management workforce, especially for globally integrated suppliers setting up business in Ethiopia.

Overview of the existing national training systems

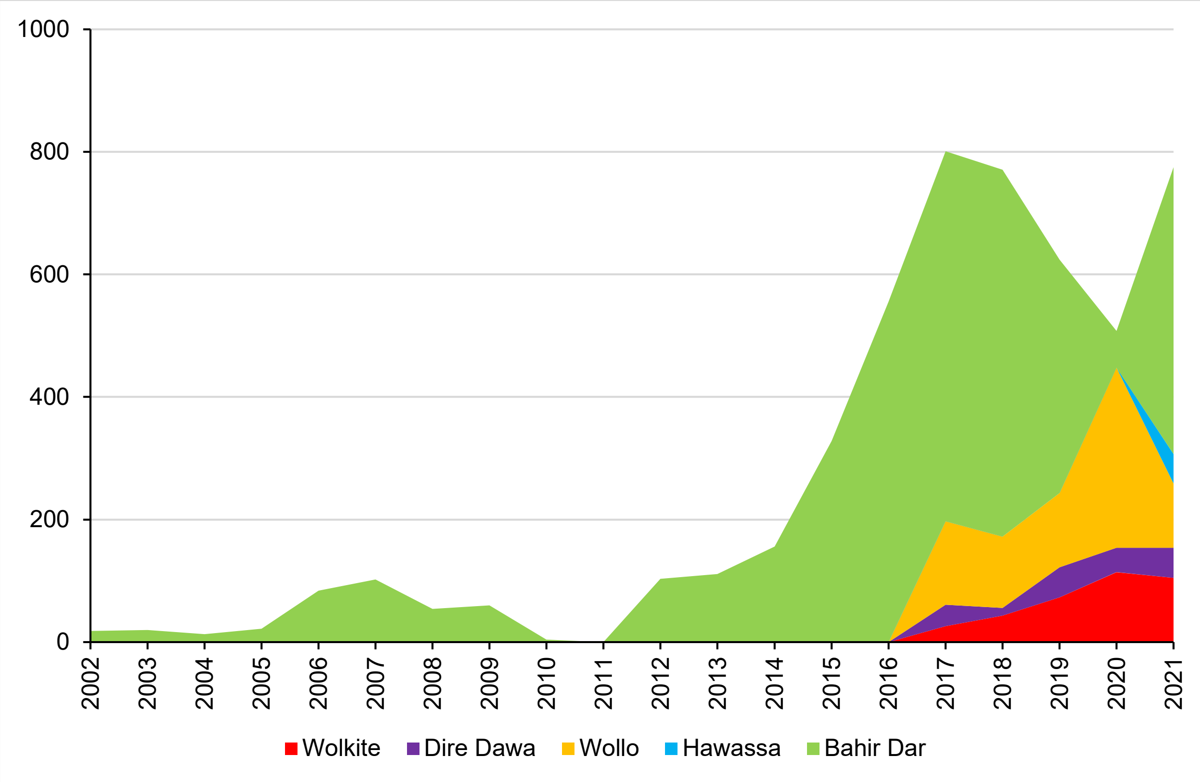
In order to understand whether training institutions provide graduates with the required skills and knowledge we asked different stakeholders to define what the priority skills and knowledge were. There was a broad consensus that an ideal factory (middle) manager would combine the following skills/capabilities: (a) relevant professional knowledge and technical skills (e.g. textile engineering, business management, finance and accounting, human resources, etc.); (b) managerial/organizational skills and (c) communication and inter-personal skills. Senior expatriate managers and some training providers also emphasised the importance of a range of 'soft skills', such as strong work ethic, 'good attitude', loyalty to the firm, willingness to learn, endurance, and teamwork, many of which can be summarised under the category of basic 'managerial skills' (GE4, CM12; CM18). Some of these soft skills were deemed particularly important in the case of HR managers and line supervisors. An important question is to what extent existing Ethiopian training programmes provide these required skills. Our research suggests that only a subset of these skills are acquired through formal training, either in university or TVET programmes.

There are three tiers of formal training provision that is relevant for management work in apparel factories. The highest tier is the university system and especially certain institutions that have over the years developed an expertise in textile- and garment-related degrees. Examples of such institutions are Bahir Dar University (BDU), Debre Birhan, Kombolcha Polytechnique college, Axum, Wollo and more recently Hawassa, all of which provide apparel-related training along with other fields of studies (GE4, GE3). Bahir Dar, for instance, houses the Ethiopian Institute of Textile and Fashion Technology (GE3). The second tier is constituted by the vast TVET system, which tends to focus on more practical training and diplomas, primarily geared for production workers but also low-middle managers (GE7). The third tier includes a number of parastatal sectoral institutes, mostly under the umbrella of the Ministry of Industry (MoI), such as the Ethiopian Textile Industry Development Institute (ETIDI) and Leather Industry Development Institute (LIDI). Other government agencies like the EIC, in partnership with international agencies like GIZ and private organisations like Entreprise Partners, also play a role in offering tailored training for new workers in industrial parks, mostly through the grading centres operating through the labour sourcing mechanisms established in IPs like Hawassa. Such training covers a diverse sets of skills, including work process management in prototype factories (GE2), soft skills in garment factories (GE4) and other short-term courses in leadership, management and governance (GE3), for example. The establishment of ETIDI resulted from a process of learning from other apparel exporting countries and aimed to more specifically target the training needs of the expanding apparel industry, albeit in a more targeted way and without enough capacity to cover the bulk of new companies in the sector (GE7). Its role eventually dwindled also as a result of difficult relations with other government agencies operating in the IPs (OT4).

These three tiers are all funded by the Ethiopian government (GE4) and sometimes also partner with international organizations such as the Korean development agency, GIZ, the East Africa Skills for Transformation and Regional Integration Project (EASTRIP), UNDP, and the ILO, which provide both funding and technical assistance for specific training programmes, usually connecting training institutions with employers.

The quantitative evidence we collected suggests there has been a significant growth in the number of programmes, training institutions and therefore trainees and relevant graduates over the past ten years. Specifically, since the industrial parks were established and an increasing number of foreign investors set up operations, the growth in the number of graduates in relevant training programmes is significant. Figure 4 shows the annual number of graduates with relevant degrees from the leading universities since 2002. A marked expansion has taken place since 2014, when the export apparel sector began its rapid growth. Both University and TVET programmes have expanded, especially in the past ten years (Fukunishi and Machikita, 2017). This fact is consistent with the common view among senior expat managers that it has not been difficult to find a pool of graduates to fill vacancies, especially for low to middle-management positions, as described above. The improvement in the quantity of training reflects a lot of effort to expand the accessibility of training opportunities across the different tiers of the Ethiopian education system (GE4).

Figure 4. University graduates with relevant degrees, 2002-2021



Source: Own compilation from different sources, facilitated by the EIC.

Nevertheless, respondents from companies, government institutions and training institutions commonly claim that the quality of existing training in Ethiopian institutions is variable and not sufficiently high for the demands of globally integrated textile and apparel suppliers. This is not an indication of shortage of graduates. For instance, textile engineers still have the highest graduate unemployment rate in Ethiopia, where more than half of the graduates remain unemployed (Central Statistical Agency, 2014; Yamada et al., 2018b). Even the training provided by specialised institutes like ETIDI receives negative feedback from foreign manufacturers, while Ethiopian manufacturers complain about ETIDI and other training providers as being excessively bureaucratic and inaccessible (OT4). By contrast, external agencies like GIZ are seen as more effective in terms of knowledge transfer and have a higher impact among Ethiopian trainees in industrial parks, which results in GIZ services being in high demand in some industrial parks (CM20).

The next subsections explore the main reasons why the quality of Ethiopian graduates in the field of apparel is not considered adequate yet. The different sets of interviews with both the demand (firms employing managers) and supply side (institutions training managers) of management workers in apparel factories shed light on a wide range of obstacles and problems underpinning the quality deficits in the Ethiopian training system. We focus on five main interrelated challenges, namely: outdated curricula focused on theoretical knowledge rather than practical skills, weak internship mechanisms, inadequate coordination between different stakeholders including weak university-industry linkages, limited central direction to facilitate coordination across providers, inadequate incentives for management workforce localisation.

Curriculum issues

Out-of-date curricula and equipment for practical training were frequently considered an obstacle to higher quality training in Ethiopia, particularly by currently employed Ethiopian middle managers, most senior expatriate managers and some training providers. Especially expatriate managers, but also many Ethiopian middle managers, regarded the focus on theoretical knowledge and lack of practical skills with state-of-the-art technology as important barriers to the improvement of the quality of graduates in relevant areas. The relatively good theoretical knowledge did help make graduates trainable at the factory level, as several senior managers pointed out, mainly because possessing some basic codified knowledge makes the learning of real-life factory floor management easier. However, for many new factories it was necessary to train recent hires from the ground up given the limitations of theoretical knowledge for the day-to-day running of operations in an apparel factory subject to intense pressures.

There was a consensus among all respondents that the current curriculum and training modalities fail to match the sector's required up-to-date codified and the core tacit knowledge, which can mainly be transmitted through learning by doing. In an attempt to address these shortfalls curricula at TVET institutions were revised from course-based to competency-based training. However, the skills acquired by TVET graduates still do not fit the demands of managerial skills in foreign firms (Yamada et al., 2018a). All this implies that curriculum revision is imperative, a point that also several training providers accepted, but change has been thus far slow (GE6; GE1). Some of the steps in this direction have been planned, such as the move from comprehensive curricula to more sector-specific and practice-oriented one, or the upgrading of TVET to university level towards becoming specialised institutes, but implementation remains a challenge.

The gap in internship mechanisms

The limited practical knowledge and skills that new graduates bring to the factory floor when they are hired for the first time in the sector reflect the tendency of training systems to focus on theoretical or codified knowledge. As many new investors complained, this lack of practical skills is a reflection of weak university/TVET- industry linkages. A basic form of linkage could be an internship in factories. Despite the existence of such opportunities, especially in the longstanding textile and garment degree programmes (e.g. BDU), most internships tend to happen in other government institutions, such as the MoTI or ETIDI. The lack of effective internships in industrial parks reinforces the enclave character of the parks and minimises the potential for training and skill transfer on the job (OT3). There is little evidence of a pro-active approach to internships on the part of either training institutions or private companies. As a key informant put it: "Universities don't see industrial parks and factories as targets for training" (OT4). Factories that are subject to constant pressures in global markets do not have sufficient incentives to seek internships, as the immediate rewards are unclear. Firms that have invested with a short-term opportunistic logic, taking advantage of incentives, will also be less likely to invest in internships and partnerships with local training providers compared to firms that have a long-term plan in the country. The weak development of internship opportunities reflects the lack of articulation between different stakeholders as well as the limited capacities of some firms and national training institutions to take the initiative.

Coordination and institutional articulation issues

Moving from vision and planning to effective implementation requires a significant degree of coordination and articulation of different training frameworks, organizations and aims. The growth in training provision across the different tiers of Ethiopia's education system happened quite rapidly and involved a host of different organizations and providers. As a result, there was an almost unanimous concern among respondents about the lack of articulation and coordination of the different parts of the training system to produce graduates with the required skills to manage the factory floor.

The limited articulation between new foreign investors and training providers was often reported by the industry representatives, government officials and training providers alike, although there was no agreement of where the root cause of these weak linkages lay. Some of the most prominent training providers, especially universities, lamented that the role of investors in the design of the Ethiopian training system is very limited (GE5, GE7) or almost non-existent (GE6), as well as the lack of a formal institutionalised mechanism for investors to participate in Ethiopia's training system (GE4). Companies, on the other hand, often complained that their views and needs were not sufficiently reflected in policies, curriculum development and training implementation, and that the institutional mechanisms to engage the private sector in a meaningful way were patchy or absent. Training institutes such as BDU also admitted that they have no formal institutional mechanism to consult investors about their training system, besides an annual international conference and ad hoc workshops on curriculum development and validation (GE6). Moreover, there were also palpable tensions between different stakeholders within the Ethiopian training provision system, notably between ETIDI and other government agencies, a claim supported by various key informants. These tensions constitute a further impediment to a broad-based and coherent system of skill development in the sector. Much could be gained from a coordinated framework where different institutions have a clear remit in a carefully managed division of labour. Unfortunately this is not achievable in the current climate of fragmentation and inter-agency tensions.

Some government officials, however, noted examples of good practice and success in linkages between firms and training providers. For example, firms played an active role in the Hawassa Industrial Park by contributing to curriculum development when the Centre of Excellence at the park was established (GE2). The Ministry of Science and Higher Education (MOSHE) has also tried to involve firms as well as sector institutes like ETIDI in the formulation of new policies and guidelines for curriculum reform and industry-government collaboration on cooperative training, technology transfer, internship, consultancy, joint applied research, and externship in a way that does not happen in other sectors (GE4).[4] Some of these positive steps point in a direction of more effective collaboration, however one that requires stronger institutionalisation and follow-up.

Limited central direction to facilitate coordination

A number of senior managers of foreign firms suggested that there are problems of policy design prioritisation and implementation. The way the country entered into the apparel industry was not well planned in terms of human resources and raw material requirements (OT5; CM12; CM18). The focus on production workers and the assumption that the

[4] Externship is where the lecturers at universities, TVET, or colleges visit factories and get training before they go to train their classes (GE1).

workforce was 'cheap' and trainable diverted attention from the imperatives of substantially improving the quantity and quality of training for management workers in this sector, according to these informants. There is a shared impression that the government primarily focused on delivering infrastructure, a plentiful supply of trainable labour, and a set of incentives for investors to start operations as quickly as possible. Establishing a well-coordinated and high-performing training system with a focus on managers for a wide range of jobs in the sector was not top of the list of priority interventions in the early stages (OT4).

According to government officials, policymakers tried to learn from experiences in countries like Vietnam, Bangladesh, Myanmar, Cambodia, Sri Lanka, and India (GE4, GE3), mostly through consultancies, joint curriculum development programs with foreign universities, and benchmarking (GE4).[5] However, this did not immediately translate in a concerted action to coordinate and articulate training efforts by the different tiers described above or to invest in the strengthening of university/TVET-industry linkages. The lack of resources and central-level prioritisation constrained these efforts and implicitly delegated part of the training responsibility on the new firms investing in industrial parks. Meanwhile, our interviews suggested that new firms did not have the time or incentives to take a more pro-active stance in engaging universities, institutes like ETIDI, and other national training providers to upgrade Ethiopian factory managers. This was especially the case given the pressures and challenges they were subject to in the early days of operations. Moreover, some government officials also blamed some of the early investors for being 'opportunistic' and entering the Ethiopian market simply to take advantage of the financial incentives the GoE provided. In the words of a university representative: "That is why we don't see a continuous development of the industry. Some foreign companies established at the early stages of the policy implementation are now out of business" (GE6).

Finally, the lack of a more pro-active central direction is also reflected in the lack of a tracking system for government institutes to record Ethiopian management employees' education and employment backgrounds and their labour market outcomes (GE4, GE1).[6] So far, the only tracking system is the one EIC uses to assess and decide whether work permits

[5] Benchmarking has now stopped due to a lack of foreign currency (G4).

[6] MOSHE plans to launch 'HR demand forecast system' in the coming 10 to 20 years (GE1). This system will focus on five sectors, namely ICT, mining, agriculture, tourism and manufacturing. At the time of writing the programme was still in the planning stage.

should be issued or renewed for foreign expatriates. Even in this case, there is no systematic assessment of the extent of knowledge transfer to Ethiopian managers and whether the efforts warrant a continuation of work permits for expatriate managers (GE2).[7]

Inadequate incentives for management workforce localisation

The previous point takes us to the question of the connection between demand for better training and incentives for management workforce localization. Several informants working in Ethiopian training institutes and in some government agencies argued that the Ethiopian government has not given enough incentives (and 'sticks') to foreign firms to localise management rapidly: "there is a lack of both stick and carrot" (OT4). As argued above, despite the promulgation of a detailed directive on the conditions for work visa renewal for expat managers, there are contradictions in the way the system is set up that may weaken the enforcement of the skill transfer conditions stipulated in the legislation (GE2, GE3, OT4). There were some question marks over the suitability of the EIC to manage the work permit allocation system, given the agency's incentive to promote foreign investment in the sector (OT4). As some respondents from training institutes suggested, if foreign companies were forced to localise their management workforce faster, they would probably need to engage training institutions more systematically to ensure a steady source of higher quality graduates were available to take up jobs, especially in a context of high turnover. Firms could thus be induced to put pressure on government to invest more and to better coordinate the provision of training specifically for middle managers. Yet, in a sector under pressure, and given the government's reluctance to put pressure on the monitoring of workforce localization and on the need for training upgrading, it is difficult for companies to invest enough time and resources in strengthening linkages with training institutions unless their medium-term profitability is undermined by a lack of a more effective managerial workforce. A new incentive framework remains imperative and the government has a role to play therein.

[7] The system is based on Proclamation Number 6/2010. Companies are required to report their progress in terms of skill transfer every three months. This report will be reviewed by the EIC every 6 months to ensure the information is updated (GE2).

6. Conclusions and policy recommendations

This report offers new evidence on the drivers and constraints on management workforce localization in Ethiopia's textile and apparel industry. We find that the localisation of the management workforce in new foreign-owned apparel factories has been slow but gradually improving since 2018, with some firms, especially larger and more globalised ones advancing more rapidly than others. There was a consensus that most Ethiopian managers did not have the relevant experience when hired and had to be trained from rather low levels. Many foreign managers reported that it would take at least five years for a local manager to assume senior management roles. On balance, the need for expatriate managers is justified on the following grounds: need of extensive work experience in a highly competitive sector; need of knowledge of the entire workflow for production managers; troubleshooting skills that can only be acquired through extensive experience, preferably within the same firm or corporate group; questions of 'trust' for senior management positions, i.e. how close senior managers must be to owners/investors to better exercise control mechanisms in the management of the factory; understanding of international customers and their shifting demands. However, it is critical that the presence of expat managers contributes rather than hinders the process of localization and skill upgrading. Indeed, there are synergies identified in a number of companies where a clear and institutionalised commitment to localize most management positions is often associated with very effective skill development and upgrading mechanisms at firm level. For example, firms that nurtured a selected group of Ethiopian managers into key middle and some senior-level management positions reported better outcomes in terms of efficiency and management of the factory workforce, with less labour conflict.

Once companies identify and train local managers into key management positions, their retention assumes great significance. We found that turnover of local managers is relatively high but not a serious problem, according to most senior managers in sampled companies. This is partly because the pool of potential candidates is large enough, even if they don't yet have the required work experience. In any case, there was consensus that the retention of high-quality Ethiopian managers is an important priority for most firms, because of the resources and time invested in training Ethiopian managers within firm-specific contexts. They incur in sunk costs that are wasted if these well-trained managers who have acquired precious factory management experience leave to other firms or even to other sectors. The main mechanisms of retention are annual salary increments combined with promotion to roles with greater responsibility and autonomy. We found that, among Ethiopian middle managers, career progression and more autonomy in decision making were important markers of success and good reasons to stay in a firm, sometime even more than salary increases.

A critical contribution of foreign firms to the future development of the sector lies in their ability and efforts to train and upgrade local managers. Our study found that firms transfer significant knowledge and especially organizational and managerial capabilities to Ethiopian managers, but such transfers are hampered by problems with incentive systems. Some foreign managers have an incentive to stay in their job and limit knowledge transfer to avoid being replaced. Ethiopian managers may move for better opportunities in other firms and therefore discourage firms from investing more in knowledge transfer. All firms engaged in different forms of training, but informal on-the-job training was generalised and considered one of the most effective ways of transferring the tacit knowledge necessary to run operations in a high-pressure environment where demands from international customers create the need for constant adaptation. The 'learning-by-doing', combined with adequate and well-organized induction programmes prove essential for an adequate transition to management jobs in firms operating in global production networks.

The need for training at firm level reflects the fact that training systems in Ethiopia have much room for improvement. We found that the quality of training in Ethiopian institutions is variable and not yet adequate to the needs of firms integrated into highly competitive global production networks. Most firms value the theoretical knowledge acquired by Ethiopian engineering and management graduates, which makes them trainable, but decry the gaps in practical skills, computing skills, and knowledge of new production processes, technology and equipment. There is also some concern over the lack of soft skills and adaptation to high-pressure work environments where quick troubleshooting skills and work flexibility are deemed essential attributes. While some senior foreign managers highlight the lack of effective communication in English as a further gap, Ethiopian middle managers regard English language as one of the benefits of their graduate training. There are different sources of codified knowledge and relevant skills, primarily within the public sector, but a lack of coordination between different Ethiopian training institutions was found to be a binding constraint on more effective university – private sector linkages.

Policy recommendations

The findings of this report generate some potentially significant policy implications, in areas where the government and its partners could contribute to make the industrial transition quicker and smoother. Indeed, the government and its development partners can also do more in terms of facilitating the process management workforce localization, on three interrelated fronts, which imply a mix of ‘carrots’ and ‘sticks’ or ‘reciprocal control mechanisms’.

First, the findings suggest that a more consistent enforcement of worker visa restrictions on management employees could accelerate the transition to a more localised management labour force. The new Directive 772/2021 clarifies the application of the rules and provides a reasonably strong tool of control, but the agencies in charge of its application need the means and support to enforce it consistently. This would require a stronger political will to achieve this goal and relevant institutions such as EIC or even ETIDI being empowered to monitor and enforce such rules. There is of course a balance to be struck between using the ‘stick’ of the Directive to increase the proportion of Ethiopians in key management roles, and carrot of incentives to the companies that achieve the goal of training management workers faster and more effectively. The main sticking point is the issue of ‘trust’ for certain senior management positions that firms may want to keep to foreign employees who have gained the trust of owners and investors after years of experience at the firm. However, the vicious circle cannot be broken unless there is a consistent approach to how to localise these senior positions, or whether these should be exempt from the rigid application of the Directive. Clarity on this matter would help agencies in charge of enforcing the visa policy.

Second, the government can do more in terms of incentivising firms to undertake training and upgrading of local managers by attaching certain ‘rents’ (by expanding or prioritising access to subsidized credit, access to foreign exchange, discounted logistics costs, marketing support, access to expanded industrial park area, etc. to the best performers in terms of workforce localization) to the achievements in training and retention of Ethiopian managers in key positions of production management, logistics, customer relations, quality control, where learning is much needed. This intervention can take the form of a ‘reciprocal control mechanism’ whereby a firm commits to localise a target proportion of management jobs including some senior positions in production management, in exchange for targeted support from the government, to facilitate their operations, especially for export. In a context of fiscal deficit and constraints on these sets of incentives, then the ‘rents’ can be established in the form of priority access to reduced rents. Alternatively, or in addition to these incentives, best performing firms in terms of management workforce localization can receive

Third, more needs to be done on the supply side of training of the future factory managers. There are three basic needs that training institutes have, based on our findings. First, more resources to modernise the equipment used for practical learning, making sure the machinery is the most relevant to companies operating in GPNs in textile and apparel. This may be done by targeting particular institutes/organisations, such as Bahar Dar University or Hawassa University and directly invest in modernisation there. Second, revise the curriculum to make sure that more practical knowledge, soft skills and modern computer skills are provided alongside basic theoretical knowledge, based on an updated diagnostic exercise of the skill needs reported by GPN-linked companies and their suppliers. Third, there is a need of revamping and resourcing the platforms of collaboration and coordination between University and industry, including the government industrial institutes (ETIDI) to make sure their actions are in sync with other training providers and indeed with foreign investors. Despite previous attempts at achieving this goal, there is an implementation gap and coordination weaknesses that need to be addressed urgently. This may be achieved by selecting industrial parks and firms within these as ‘centres of learning or excellence’, with well resourced apprenticeship mechanisms, combined with support from international partners like GIZ, which have extensive experience in these initiatives. The industrial park centres of learning could be linked to particular Ethiopian training institutions, with priority on those with established experience in the sector. Apart from supporting learning systems in these training institutions, participating companies could benefit from having access to the best trainees, who would have already gained valuable practical experience by participating in different parts of the production workflow of a textile or apparel factory.

References

Abebe, G., Bundervoet, T., & Wieser, C. (2020a). 'Monitoring COVID-19 Impacts on Firms in Ethiopia, REport No. 10: Results from a High-Frequency Phone Survey of Firms.' World Bank. https://doi.org/10.1596/33766

Abebe, G., Bundervoet, T., & Wieser, C. (2020b). 'Monitoring COVID-19 Impacts on Firms in Ethiopia, Report No. 7: How Ethiopian Firms are Adapting to the Pandemic? A Brief Look at the Evidence from HFPS-F [Brief].' World Bank. https://doi.org/10.1596/34461

Acemoglu, D. and Pischke, J.S., (1999). Beyond Becker: Training in imperfect labour markets. The economic journal, 109 (453), pp.112-142.

Amsden, A. H. (2001). The rise of "the rest": challenges to the west from late-industrializing Economies. Oxford: Oxford University Press.

Andreoni, A., (2010). A Capability Theory of Production: learning in time, complementarities and proximities. In DIME workshop Process, Technology, and Organisation: Towards a useful Theory of Production, LEM, Scuola Superiore Sant'Anna, Pisa (pp. 8-9).

Andreoni, A., (2014). Structural learning: embedding discoveries and the dynamics of production. Structural Change and Economic Dynamics, 29, pp.58-74.

Anner, M. (2022). Power relations in global supply chains and the unequal distribution of costs during crises: Abandoning garment suppliers and workers during the COVID-19 pandemic. International Labour Review, 161(1), 59–82.

Alves, A. C., & Lee, C. (2022). Knowledge Transfer in the Global South: Reusing or Creating Knowledge in China's Special Economic Zones in Ethiopia and Cambodia? *Global Policy*, *13*, 45-57.

Atta-Ankomah, R., Appiah Kubi, J., & Ackah, C. G. (2022). The Effect of Kaizen on Performance: Evidence from Manufacturing Enterprises in Ghana. *The European Journal of Development Research*, *34*(2), 1167-1192.

Barrett, P.M. and Baumann-Pauly, D., (2019). Made in Ethiopia: Challenges in the Garment Industry's New Frontier. *Center for Business and Human Rights, NYU-Stern, May*.

Beyene, B.M. and Tekleselassie, T.G., 2018. *The State, Determinants, and Consequences of Skills Mismatch in the Ethiopian Labour Market* Working Paper n. 21, Ethiopian Development Research Institute.

Bhanugopan, R. and Fish, A., 2007. Replacing expatriates with local managers: An exploratory investigation into obstacles to localization in a developing country. *Human Resource Development International*, 10(4), pp.365-381.

Brautigam, D., Weis, T., & Tang, X. (2018). Latent advantage, complex challenges: Industrial policy and Chinese linkages in Ethiopia's leather sector. *China Economic Review*, *48*, 158-169.

Calabrese, L., & Balchin, N. (2022). Foreign Investment and Upgrading in the Garment Sector in Africa and Asia. *Global Policy*, *13*, 34-44.

Cassar, L. and Meier, S., 2018. Nonmonetary Incentives and the Implications of Work as a Source of Meaning. *Journal of Economic Perspectives*, *32*(3), pp.215-38.

Chang, H. and Andreoni, A. (2020) 'Industrial Policy in the 21st Century'. *Development and Change*, (51) 2.

Chen, W. (2021). 'The dynamics of state–business relations between the Ethiopian state and Chinese private firms: A case study of the Eastern Industrial Park.' WIDER Working Paper n. 122.

De Cieri, H. and Dowling, P.J., (1999). Strategic human resource management in multinational enterprises: theoretical and empirical developments. *Research in personnel and human resources management*, 4, pp.305-327.

Ellis, M., McMillan, M. S., & Sovani, M. (2021). Labor-related knowledge transfers from Chinese foreign direct investment in Ethiopia and Tanzania. IFPRI Discussion Paper 02078

Ethiopia Monitor. (2022). Kombolcha Industrial Park Resumes Operation – Ethiopian Monitor. https://ethiopianmonitor.com/2022/01/18/kombolcha-industrial-park-resumes-operation/

Enterprise Partners Report (2018) - LABOUR MARKET Ensuring Better HR System. UKAID

Fei, D. (2022). 'Chinese in Africa: expatriation regime and lived experience', *Journal of Ethnic and Migration Studies*, DOI: 10.1080/1369183X.2022.2029373

Fei, D., Samatar, Abdi, C., and Liao, C. (2018). Chinese-African Encounters in High-Tech Sectors: Comparative Investigation of Chinese Workplace Regimes in Ethiopia'. *Development Policy Review*, 36(1), O455–O475. https://doi.org/10.1111/dpr.12357.

Fei, D., (2018). *Work, Employment, and Training Through Africa-China Cooperation Zones: Evidence from the Eastern Industrial Zone in Ethiopia'* (No. 2018/19). Working Paper.

Festing, M. and Tekieli, M., (2018). Global alignment or localization? An empirical examination of global reward management in MNEs from a subsidiary perspective. *The International Journal of Human Resource Management*, pp.1-39.

Fu, X., Essegbey, G.O. and Frempong, G.K., (2019). *Multinationals, Local Capacity Building and Development*. Edward Elgar Publishing.

Fukunishi and Machikita, (2017). Vocational education and employment outcomes in Ethiopia: displacement effects in local labor markets. IDE Discussion Paper n. 678. Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO) http://www.ide.go.jp http://hdl.handle.net/2344/00049739

Gamble, J. (2000). 'Localising Management in Foreign-invested Enterprises in China: Practical, Cultural, and Strategic Perspectives'. *The International Journal of Human Resource Management* 11 (5): 883–903.

Gamble, J., (2011). *Multinational retailers and consumers in China*. London: Palgrave.

Giannecchini, P., & Taylor, I. (2018). The eastern industrial zone in Ethiopia: Catalyst for development? *Geoforum*, 88, 28–35. https://doi.org/10.1016/j.geoforum.2017.11.003

Hauge, J, & Schaefer, F. (2022). The limits of state capitalism: the rise and decline of the Ethiopian developmental state. Unpublished mimeo.

Halvorsen, S.K. (2021). 'Labour turnover and workers' well-being in the Ethiopian manufacturing industry'. WIDER Working Paper, No. 2021/36, Helsinki.

Hilton, T. (2019). *Skills for Competitiveness – Hawassa Industrial Park Sourcing and Training Employees in the Region: Private Enterprise Programme Ethiopia* (p. 30). Department for International Development.

Huy, Q. N. (2001). In praise of middle managers [Electronic Version]. Harvard Business Review, 73-79. Retrieved 14/3/06.

IndustiALL. (2021, April 15). *Workers fear returning to work in Ethiopia's war-torn Tigray region*. IndustriALL. https://www.industriall-union.org/workers-fear-returning-to-work-in-ethiopias-war-torn-tigray-region

Khan, M.H., (2019). Knowledge, skills and organizational capabilities for structural transformation. *Structural Change and Economic Dynamics*, 48, pp. 42-52.

Khan, M.H, (2013). Technology policies and learning with imperfect governance. In: Stiglitz, Joseph, Lin, Justin Yifu (Eds.), *The Industrial Policy Revolution 1. The Role of Government Beyond Ideology*. Palgrave, London, pp. 79–115.

King, A.W., Fowler, S.W. and Zeithaml, C.P., (2001). Managing organizational competencies for competitive advantage: The middle-management edge. *Academy of Management Perspectives*, *15*(2), pp.95-106.

Mengistu, A., Krishnan, P., Maaskant, K., Meyer, C. J., & Krkoska, E. (2020). *Firms in Ethiopia's Industrial Parks: COVID-19 Impacts, Challenges, and Government Response* [Policy Note]. World Bank. https://doi.org/10.1596/34573

Meyer, C. J., Hardy, M., Witte, M., Kagy, G., & Demeke, E. (2021). The market-reach of pandemics: Evidence from female workers in Ethiopia's ready-made garment industry. *World Development*, 137, 105179.

Oya, C. (2019) 'Building an Industrial Workforce in Ethiopia.' In: Cheru, Fantu, Cramer, Christopher and Oqubay, Arkebe, (eds.), *The Oxford Handbook of the Ethiopian Economy. Oxford: Oxford University Press*, pp. 668-686.

Oya, C., & Schaefer, F. (2021). The politics of labour relations in global production networks: Collective action, industrial parks, and local conflict in the Ethiopian apparel sector, *World Development*, 146, 105564.

Paul, R., Ringstrom, A., & Bavier, J. (2020, December 9). Ethiopia's war risks leaving manufacturing dreams in tatters. *Reuters*. https://www.reuters.com/article/ethiopia-conflict-manufacturing-idUSKBN28J0LG

Polanyi, M., (1967). *The Tacit Dimension*. Doubleday Anchor, Garden City NY.

Ramirez, P., & Rainbird, H. (2010). Making the connections: bringing skill formation into global value chain analysis. *Work, employment and society*, 24(4), 699-710.

Reuters. (2022, January 1). *US Takes Ethiopia, Mali, Guinea Off Africa Duty-free Trade Program*. VOA. https://www.voanews.com/a/us-takes-ethiopia-mali-guinea-off-africa-duty-free-trade-program/6378509.html

Schaefer, F. and Oya, C., 2019. Employment Patterns and Conditions in Construction and Manufacturing in Ethiopia: A Comparative Analysis of the Road Building and Light Manufacturing Sectors. IDCEA Research Report. www.soas.ac.uk/idcea

Selmer, J. (2010), "Expatriate cross-cultural training for China: views and experience of "China Hands"", *Management Research Review*, Vol. 33 No. 1, pp. 41-53

Shaorshadze, I. and Krishnan, P., 2012. Technical and vocational education and training in Ethiopia. *Paper for the International Growth Centre–Ethiopia Country Programme.*

Spencer, J.W., (2008). The impact of multinational enterprise strategy on indigenous enterprises: Horizontal spillovers and crowding out in developing countries. *Academy of Management Review*, 33(2), pp.341-361.

Tang, X., (2016). Does Chinese Employment Benefit Africans? Investigating Chinese Enterprises and their Operations in Africa', *African Studies Quarterly*, 16(3/4): 107–128.

Tang, X. (2019). Export, Employment, or Productivity? Chinese Investments in Ethiopia's Leather and Leather Product Sectors. SAIS-CARI Working Paper No. 2019/32. http://www.sais-cari.org/publications-working-papers

US Congress, T. (2022, September 2). H.R.6600 - 117th Congress (2021-2022): Ethiopia Stabilization, Peace, and Democracy Act (2021/2022) [Legislation]. https://www.congress.gov/bill/117th-congress/house-bill/6600

Whitfield, L., & Staritz, C. (2021). The Learning Trap in Late Industrialisation: Local Firms and Capability Building in Ethiopia's Apparel Export Industry. *Journal of Development Studies*, 57(6), 980–1000. https://doi.org/10.1080/00220388.2020.1841169

Whitfield, L., Staritz, C., Melese, A. T., & Azizi, S. (2020). Technological Capabilities, Upgrading, and Value Capture in Global Value Chains: Local Apparel and Floriculture Firms in Sub-Saharan Africa. *Economic Geography*, 96(3), 195–218. https://doi.org/10.1080/00130095.2020.1748497

Whitfield, L., Staritz, C., & Morris, M. (2020). Global Value Chains, Industrial Policy and Economic Upgrading in Ethiopia's Apparel Sector. *Development and Change*, 51(4), 1018–1043. https://doi.org/10.1111/dech.12590

Wolter, S. C., and P. Ryan (2011). "Apprenticeship" In E. A. Hanushek, S. J. Machin, and L. Woessmann (eds) *Handbook of the Economics of Education*, pp. 521–76. Amsterdam: Elsevier.

Woretaw, A., (2012). *Employee Training and Development Practice in Selected Ethiopian Leather Footwear Factories (Evidence from Selected Shoe Factories)* (Doctoral dissertation, Addis Ababa University).

Yamada, S., Otchia, C.S., Shimazu, Y., Taniguchi, K. and Nigussie, F., (2018a). Bridging the Supply-Demand Gaps of the Industrial Workforce: Findings from a Skills Assessment of Garment Workers in Ethiopia. Skills and Knowledge for Youth Research Project. Technical Report. t.ly/bG0-

Yamada, S., Otchia, C.S. and Taniguchi, K., (2018b). Explaining differing perceptions of employees' skill needs: the case of garment workers in Ethiopia. *International Journal of Training and Development*, 22(1), pp.51-68.

Zhu, C. J., De Cieri, H., Fan, D., & Mike Zhang, M. (2018). Expatriate management in emerging market multinational enterprises (EMNEs): reflection and future research agenda. *The International Journal of Human Resource Management*, *29*(11), 1787-1798.