The labour market in Angola is by and large characterized by high urban unemployment rate, including disguised unemployment of those who have given up looking for jobs, high levels of informality in labour relations, underemployment in rural areas where unemployment is not an option for the poorest. Although the main reason for labour market characteristics is the limited formal labour demand for better paid workers, there is generally a skill deficit in the labour force, i.e. lack of a well-trained labour force, primarily due to the low level of schooling and vocational training considering the income per capita of Angola. Qualitative interviews frequently stressed this structural deficit of workers with employable skills in both the construction and manufacturing sectors, despite the reported growth in these sectors during the period 2002-15. However, employment generated in these sectors since the end of the war in 2002 has led to an improvement in the situation and an expansion in the pool of workers with relevant skills. Yet, this growth has not been enough to meet the demand for semi-skilled and skilled workers like electricians, welders, carpenters, heavy machinery operators, among other categories. The Angolan vocational education system has not generated enough candidates with the relevant skills. Therefore, companies in these sectors still represent very important sources of formal and informal on-the-job training for workers to contribute to skill development, particularly in public works construction and construction materials manufacturing.

Since 2002 there has certainly been some substantial job creation for low-skilled and semi-skilled labour in the construction / public works sector, starting from a low base. Despite the stagnation of employment in this sector during the crisis of 2015 and 2016, the number of full-time workers was more than double what was officially reported in 2002.
Most of the construction companies and factories in our sample survey reported a significant fall in employment since 2015 and particularly in 2016. This was mostly evident in the Angolan companies and other foreign companies (OF) that operated at the minimum of their capacity, essentially relying on their permanent ‘core’ labour force.

By contrast, several Chinese firms were able to start new projects or finalize ongoing projects and thus employ new workers due to the availability of new funds from the new Chinese credit line to the Angolan government approved in 2015. Therefore, it is important to stress the crucial role that public investment and credit lines for infrastructure have played in the process of job creation in Angola. The impact of the crisis on manufacturing companies is also reflected in two challenges: (a) the lack of demand for construction materials from infrastructure contractors; (b) the lack of foreign exchange in the economy, with a consequent impact on the operations of companies that still heavily rely on imports of intermediate inputs, equipment and spare parts for their machines. In this context all companies in our sample faced a significant slowdown in their activity.

Workforce localization patterns: hiring of Angolan workers

The post-war reconstruction in Angola, particularly in the early stages, allowed for the recruitment of an expat labour force in order to fill the gap of semi-skilled and skilled construction workers in large-scale public works projects. This was also exacerbated by the political expediency of infrastructure reconstruction and therefore the pressures under tight timeframes for many construction projects. This was especially the case for Chinese contractors, which started operations in Angola after 2002, and initially were more dependent on the deployment of Chinese expat labour. This study collected up-to-date information on the actual use of Angolan workers in these sectors during the period of the survey, i.e., in 2016 and 2017. The research found that:

1. The localization rate was comparatively lower in Chinese firms (74%), as expected, in both road building and manufacturing (Table below). Non-Chinese firms, however, also depend on expat personnel for some skilled, technical and management positions. The localization rates found in Angola differ from those observed in other African countries, particularly in Ethiopia, where the average is close to 90% and there is no recruitment of expat labour for low-skilled and semi-skilled labour.

2. The number of Angolan workers in Chinese firms has been growing significantly over the last 10 years in absolute and relative terms, as localization rates have increased from around 50% in the early days of post-conflict reconstruction to the current rate close to 75%. Three key factors explain this trend: (a) as the companies consolidate their presence in the market they find a higher number of more qualified workers and retain their trained workers; (b)
the costs of Chinese expat workers has increased significantly due to wage growth and logistical costs; (c) introduction of new requirements from the Angolan government, or better enforcement of old requirements, for companies to hire more local labour.

3. The best examples of the use of national workers in infrastructure construction (90% or above) come from few OF and Angolan companies with long experience in the Angolan market and a highly developed training policy that is directly linked to the retention of the most experienced and skilled workers in the company and in the sector.

Table 1. Workforce localization rates

<table>
<thead>
<tr>
<th>Average sample localization rates (%)</th>
<th>Not Chinese</th>
<th>Chinese</th>
<th>Total</th>
<th>No. firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>86</td>
<td>71</td>
<td>79</td>
<td>19</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>92</td>
<td>78</td>
<td>84</td>
<td>15</td>
</tr>
<tr>
<td>total</td>
<td>88</td>
<td>74</td>
<td>81</td>
<td>34</td>
</tr>
</tbody>
</table>

Source: IDCEA survey, 2017

Working conditions and employment patterns

In relation to working conditions and labour force characteristics, there is a significant variation by sector, type of worker, origin of the labour force and origin of the company. These are the main findings:

1. The research identified three distinct segments of the labour force in sampled firms:
   a. A semi-skilled workforce with more relevant work experience and better qualifications, much more concentrated in leading Angolan companies and in the main non-Chinese foreign TNCs.
   b. A low-skilled workforce employed under formal labour arrangements, with more work experience and longer job tenure mainly in Angolan and most other foreign firms.
   c. A migrant workforce from the Centre-South region of Angola, with mostly low-skilled workers with low level of schooling and from relatively poorer socio-economic backgrounds, strongly concentrated in Chinese companies, both in construction and in building materials factories in Luanda.

2. Simple descriptive comparisons of monthly wages by origin of firm suggest, at first glance, that wages are lower in Chinese firms for two categories of workers, namely low-skilled workers in road building and semi-skilled workers in manufacturing. On the other hand, wages are similar for the other categories of low-skilled workers in manufacturing and semi-skilled workers in construction. These differences are partly due to the labour force segmentation discussed above. Therefore, once we control for worker, sector and company characteristics through regression analysis we find that whether a company is Chinese or not does not affect average wage levels, and the main determinants of wages are:
   - The skills group to which the worker belongs.
   - The educational level and the worker’s working experience in the sector.
   - The job tenure in any given firm (seniority).
   - The socioeconomic status and relative poverty of the worker.
   - The size of the firm.
   - The geographical origin of the migrant workers and whether they live in the company’s dormitory.
     i. The sampling protocol followed in some companies (higher wages in companies where only permanent workers and the core workforce were at work).

3. For some categories of low-skilled workers in manufacturing and construction Chinese enterprises pay lower average wages under less ‘formal’ labour arrangements, but they also employ poorer
workers, many of them migrants from the Centre-South region of Angola, who paradoxically save more of these wages and send back home as remittances. This is largely possible because the cost of living faced by these migrant workers is greatly reduced by the fact that they have accommodation and food provided by the company. These workers therefore do not incur in housing, food or transportation expenses, which are very important especially for those working in and around Luanda (65% of the total study sample). Workers on higher wages in other companies struggle to make ends meet.

4. Therefore, a significant proportion of workers in Chinese firms, are younger, have more informal employment relationships and benefit less from certain fringe benefits (paid leave, sick-leave, etc.) but receive more in terms of "social wage" for maintenance costs as they live in company dormitories (with paid accommodation and food). This labour regime helps Chinese firms exert more labour control and fight absenteeism, low productivity, high turnover and lateness at work.

5. The construction sector is characterized by longer working hours, around 10 hours, while in the factories most workers work around 8-9 hours. We did not find statistically significant differences between Chinese, Angolan and other foreign companies' working schedules, but the 6-day week was more prevalent in Chinese companies in construction projects under pressure to complete works, especially ahead of elections.

6. In relation to labour relations and management-worker bargaining, there are some important differences by sector and origin of the firm. In general, trade union presence is very weak in Angola and indeed in this sample (25% of workers). In the construction sector trade union presence particularly weak and it is lower in Chinese firms, which have a reputation for avoiding trade unions at the workplace and favour bargaining and dispute resolution with workers on an individual and ad hoc basis. However, survey data suggest that labour conflict and strikes do not differ between companies by origin (in fact, less common in Chinese firms) and is more frequent in the manufacturing sector. There are also no differences across companies in terms of reported work-related accidents (about 15% of all workers surveyed) and occupational injuries or workplace-linked health problems (40 to 48% incidence), but accidents and injuries are relatively more frequent in the construction sector where the risks are greater, and slightly less frequent for Chinese firms.

Figure 2. Trade unions and labour conflict