



Insight

Bridging Thailand's Labor Gap



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Executive Summary

A growing shortage of workers is one of the main challenges facing Thai companies today, as business owners and executive will tell you. The problem will only worsen in the years ahead, which is bad news for Thailand's stumbling economy. GDP growth has been slowed by this hurdle for several years already. In this issue of Insight, SCB Economic Intelligence Center looks at three aspects of the labor gap. We assess the current state and future growth of the problem, examine its causes, and propose some ways companies can cope.

Our analysis is based in part on a nationwide survey of companies in six key sectors that we conducted last year. We found at least half of Thai firms have trouble filling vacancies within a three-month search. The problem is worst in labor-intensive industries, such as construction, and industries that require specific skill sets, such as automobiles & parts, and electronics & electrical appliances. These industries are not only big but strategic, because they play a leading role in Thailand's growth performance. Other sectors are also hit.

There are basically three causes:

1. Thailand's demographic transition into an "aging society" – The nation's number of people of working age, i.e., 15 – 64 years old, will peak in 2018, after which it will only shrink. Growth of the workforce during the past four or five decades has given the economy a boost every year. It was nice while it lasted, but now we must learn how to get more work done with fewer hands.

2. Underinvestment in industry as well as government farm support policies that distort market forces and perpetuate inefficiency – Companies haven't spent enough to provide the most productive tools and workplace conditions that would enable them to increase pay and attract more recruits. And with public subsidies and other schemes to prop up the agriculture sector, it's no wonder that many unskilled workers stick to farming.

3. Workers lack the skills that employers need – Thailand's education system turns out too few technicians, engineers and scientists. The quality of schooling is low.

These factors help explain why Thailand's global competitiveness has been sinking in the World Economic Forum's annual survey. During the past five or more years, the labor crunch has choked off some of the economy's ability to grow. Lower GDP growth means a slower rise in living standards and more pressure on public finances. Policymakers should do more to help narrow the labor gap.

The nation's labor shortages involve both quantity and quality – not enough people, low skills. The quantitative gap will most hurt the construction industry, which needs lots of workers, whereas the qualitative gap will most affect carmakers, which need people with vocational training and





science and engineering backgrounds. The electronics and electrical goods industry will face shortfalls in both numbers of workers and skills.

Narrowing the labor gap calls for three types of measures. Companies can:

1) Revamp hiring by improving recruitment networks and processes, relying on foreign workers, and beefing up pay and benefits.

2) Improve worker productivity by increasing the use of machinery and technology, redesigning processes, and enhancing training.

3) Increase staff retention by improving job satisfaction and engagement.

All three approaches are necessary. A company needs to hire enough new recruits, give them the right tools and skills, and make sure they are happy and dedicated. Bridging the labor gap means staying both fully staffed and highly efficient.





What causes labor shortage in Thailand?

EIC conducted a survey in 2014 that clearly indicated that shortages of labor are hindering Thai businesses today. We identified three key factors as causing the problem: 1) the rapid aging of Thailand's populace, 2) inadequate investment in industrial productivity and 3) impractical schooling.

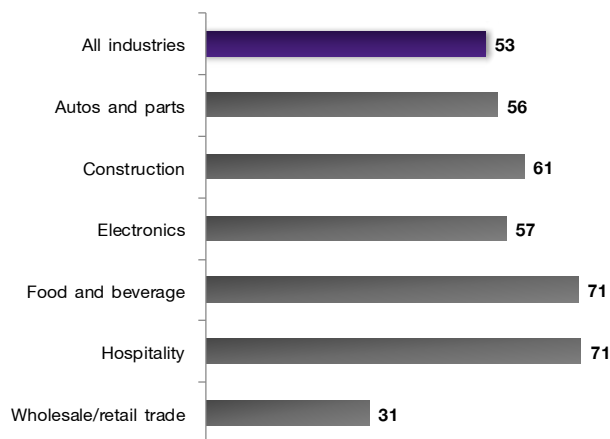
The resulting labor shortfall has dragged down Thailand's economic growth and international competitiveness. Thus policymakers should make it a priority to tackle the labor problem through changes to industry development schemes, taxes, education, regulations on foreign labor and so on.

Labor shortage is one of the main challenge facing Thai businesses today. A survey by EIC in the first quarter of 2014 found that over 50% of companies were unable to fill vacancies within a period of three months. The gap is especially acute in industries with harsh working conditions, such as construction, as well as in those requiring special skills, such as automotives, electronics and hotels and restaurants. Businesses with better working conditions and less need for technical skills face smaller shortfalls.

1 A growing scarcity of workers is among the biggest headaches in Thai industry. Workers with vocational degrees are especially needed.

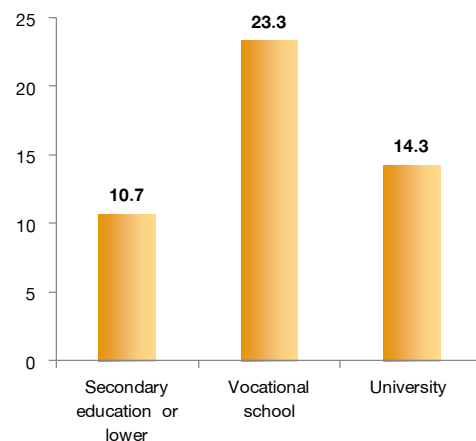
Most businesses surveyed say recruiting is a key challenge

% of firms unable to fill job vacancies within 3 months



Openings for vocational-school graduates are hardest to fill

Shortage of workers by education level (% of group workers)



Source: EIC surveys of 222 firms across six key industries (January-March 2014)

EIC's survey finds that the biggest shortage is of workers with vocational degrees. In this category, the shortfall is 23% of the total numbers of workers needed. In other words, for every 100 job openings for vocational school graduates at a given time, only 77 recruits are available. The supply of university graduates is better, but there is still a 14% hiring gap. As for jobs that require a high school education or less, the shortfall is 11% of openings (Figure 1). These survey figures corroborate EIC's findings from focus-group interviews, which revealed that the trouble with hiring vocational workers is a sheer lack of candidates. The challenge in recruiting university graduates is the lengthy time needed to find those with the right skill sets.

It's important to note that many employers actually tend to prefer candidates with higher vocational certificates (i.e., two-year diplomas from post-secondary vocational institutes) over recruits with university degrees wherever possible, such as for production line managers or sales persons. This is because vocationally trained workers have already learned practical job skills and workplace adaptability. They actually require less training than book-smart university kids.

What is causing labor shortages in Thailand?

Three factors are generating shortfalls of labor.

1. Rapid aging of Thailand's population structure

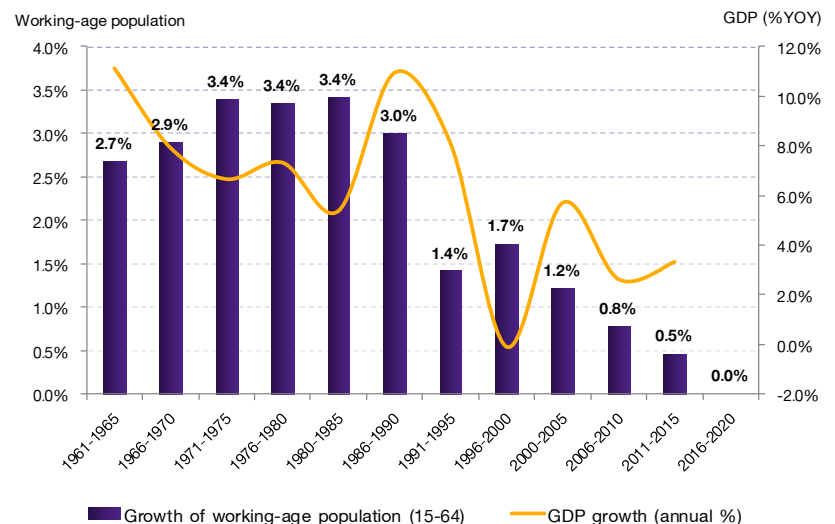
The number of Thais who are of working age (i.e., 15-64 years old) will peak in 2018 and shrink thereafter. Thailand's decades of unprecedented economic growth from 1970-1990 were driven in part by fast growth in the size of the working-age population, at rates around 2.5-3.5% per year, a legacy of high birth rates in earlier years. GDP growth ranged from 6 to 11% during those years, among the highest sustained rates in world history. This was Thailand's period of what economists call "the demographic dividend," characterized by an economically optimal population structure shaped by a shift away from farming toward occupations in industry; more women entering the workforce; and fewer non-working dependents like children and old people. This big increase in the numbers of people working helps drive economic growth because labor, together with capital and technology, is a key factor in production.



2 Labor force is an important factor of production, along with capital and technology.

Growth of Thailand's working-age population (15-64 years old)

Unit: average annual growth rate (%)



Source: EIC analysis based on data from US Census

Note that during those years of fast modernization and after, in Thailand as in other industrializing countries, birth rates fall, in part because urban families tend to opt for having fewer children than do rural ones working the land. As a consequence of fewer births, the working-age population eventually shrinks, as soon will be the case here in Thailand. Meanwhile, the nation's progress in delivering better medical care has been increasing the number of elderly. As a result, the productivity of each working age Thai will be divided among more and more elderly dependents. Today there are 10 elderly folks for every 100 people of working-age, but that ratio will rise above 16 per 100 in 2020.

The upshot is that Thailand is becoming a so-called "aging society." And this transformation is happening much faster than in neighboring countries with comparable levels of economic development. In Indonesia, Malaysia and the Philippines, the size of working-age population is likely to grow throughout the next two decades (Figure 3).

2. Productivity investment has been lagging since 2007

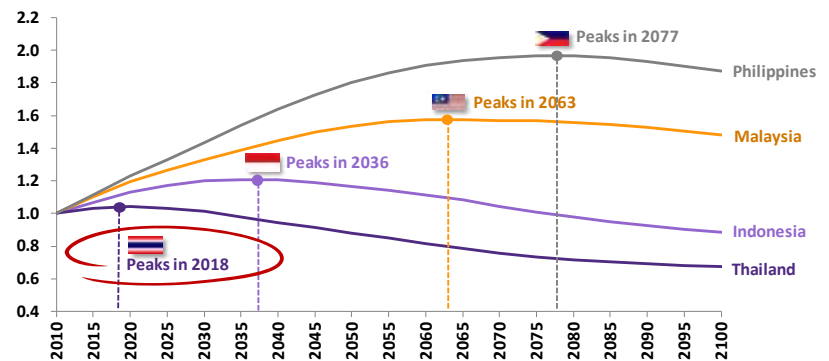
Poor deployment of human resources has also worsened Thailand's labor problem during the past decade, a consequence of shortsighted management and government policy. Workers lack the right tools.

From 2007 through 2013, both the government and private sector have invested too little in the machinery and infrastructure needed to enhance productivity. Thailand's average annual growth in investment per worker has been just 0.9%, compared to 12% in China and 4-5% in Malaysia and Indonesia (Figure 4). In fact, in real terms, Thailand's annual level of capital spending not only fell after the 1997 financial crisis; it has not recovered to the pre-crisis level during any single year since! In contrast, capital spending by Thailand's rivals has substantially exceeded their pre-crisis levels (Figure 5).

3 Thailand's early transition into aging society compared to other ASEAN countries.

Elsewhere in ASEAN, human resources will grow steadily for decades

Forecast of working-age population in select ASEAN countries (index: 2010=1)

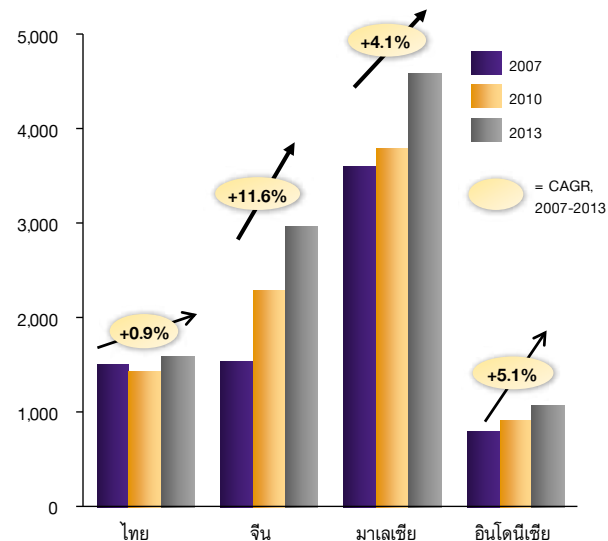


Note: Working population is defined as those aged 15-65. Source: EIC analysis based on data from World Bank, NSO, and US Census

4 Thailand's relatively low investment during the past decade.

Thai capital spending is low and stagnant while rival economies ramp up investment

Real Investment per workers (USD million, in 2005 dollars)



Source: EIC analysis based on data from CEIC

Why have businesses and government scrimped on tools, technology and infrastructure? One big reason is that it's simply cheaper to hire migrant workers.

Thailand hosts some 3 million migrants, most of them illegal, from Myanmar, Cambodia and Laos, according to the United Nations' International Labor Organization. (The government's official number of registered workers is 1.2 million.) Although migrants are mostly unskilled, their wages are low, often below the official minimum. Businesses therefore lack incentive to invest in new machinery to augment labor. This limits productivity.

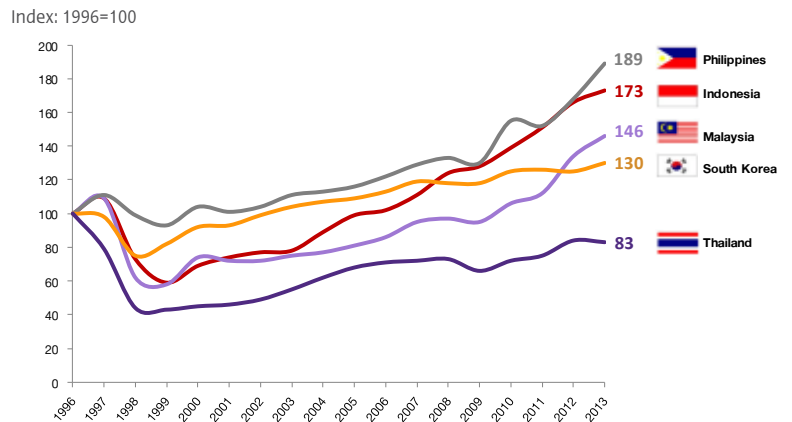
Under-investment also means that too many Thai workplaces lack the kind of equipment and infrastructure that would make them safer, easier, cleaner and more comfortable. (Witness the hand buckets deployed at many construction sites, or the lack of air-conditioning in many factories.)

As a consequence, many Thais choose to go back to farming instead of services or manufacturing, especially because prices for agricultural products rose during 2008-2011. Higher wages used to attract Thais into non-agricultural jobs. But lately it actually pays better to farm! In 2000, a non-agricultural worker with at least a primary education earned 1.5 times the average wage he or she would earn in farming – the industry's so-called "wage premium." But in 2011, that number fell to just 0.9 times.

The hike in Thailand's national minimum wage to 300 baht per day in 2013 did increase the non-agricultural wage premium, but only a bit. (Figure 6). The basic pay problem is that unskilled people working outside agriculture lack the tools and conditions that would translate their efforts into productivity and wages higher than in farming. As these Thais opt for the better earnings available on the farm, manufacturing and service industries are stymied by a growing lack of unskilled workers.

5 Thailand's real investment has not recovered since the 1997 Asian Financial Crisis.

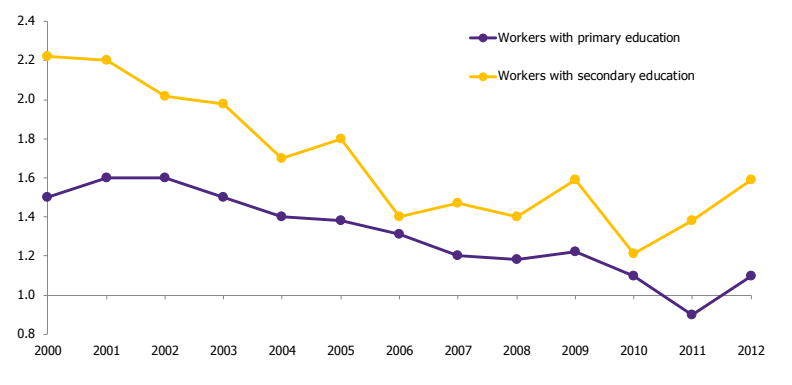
Real investment



Source: EIC analysis using data from World Bank.

6 The relative return to labor in non-agricultural sector has largely decreased.

Wage premiums for non-agricultural workers



Source: EIC analysis based on data from NSO and Dilaka and Chucherd (2013)

3. The labor force lacks needed skills.

EIC's interviews with companies reveal a mismatch between the job skills employers seek and the skills actually possessed by workers trained in the Thai educational system. This gap can also be traced in several labor market indicators.

- **Figures show that since 2004, workers with an undergraduate diploma or higher degree have increasingly entered the informal labor market**, which includes self-employment, unpaid work in a family business or a job in a firm with no more than five employees. In 2004, 21% of informal-sector jobs were held by university graduates. By 2014, the figure had risen to 27%. Moreover, at least half of these degree-holding, informal-sector workers are employed in retail sales and restaurants. Because employment in the formal sector, i.e., corporations and government, tends to offer better pay and benefits, we can assume that most university graduates would prefer it if they have qualifications to get hired. So their rising presence in informal employment probably means more and more of them are simply unable to find satisfactory jobs in the formal-sector market (Figure 7). In other words, the formal sector can't compete with the informal one in terms of compensation.

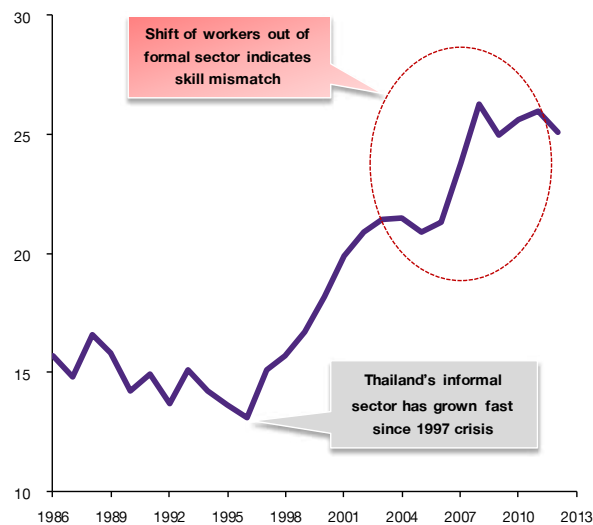
- **Another bad sign: Thai businesses take too long to recruit professionals.**

Hiring speed is an indicator of how well the available supply of labor matches actual demand. According to a World Bank survey, Thai employers take as long as 7 weeks to recruit professional-level employees, whereas their counterparts in Malaysia and the Philippines only take 5-6 weeks. That survey result echoes findings from EIC's interviews, which revealed that the recruitment process for applicants with university degrees takes an average of 8-10 weeks. (Figure 8).

7 Workers with at least bachelor's degrees have increasingly entered the informal labor market since 2004.

University-educated workers increasingly join the informal sector instead of corporates

Share of informal employment (% of university-educated labor force)

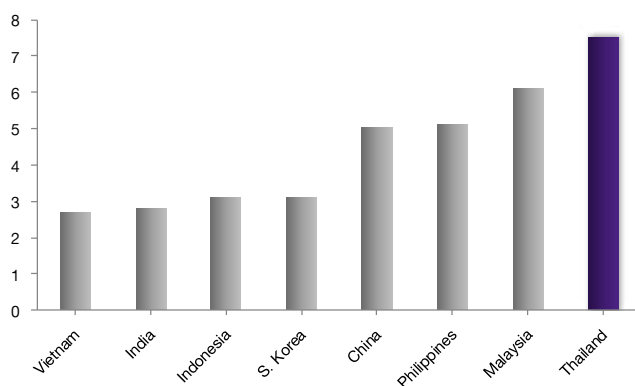


Notes: Informal employment consists of self-employed, unpaid family workers and businesses with <= 5 workers.
Source: EIC analysis based on data from LFS and WEF

8 Thai businesses take on average 8-10 weeks to hire professional-level employees.

Time required to fill professional vacancies

Unit: weeks



Source: EIC analysis based on EIC survey, World Bank

- The gap between workers' skills and employers' needs worsens the labor shortfall.

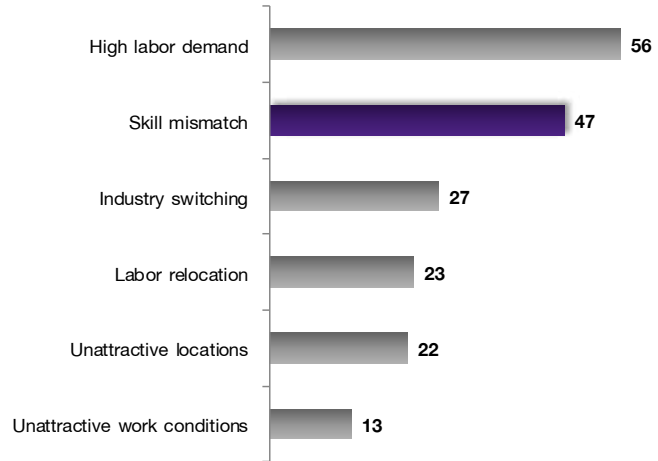
Among the companies surveyed, 47% report that the skill mismatch is the main reason they could not find workers within 90 days of searching. (Figure 9)



9 Skill mismatch is the main cause of labor shortage for 47% of businesses interviewed.

Why is your business facing a shortage of labor?

Unit: percent of all firms surveyed



Source: EIC analysis based on EIC survey

Two factors cause the skills gap:

3.1 Local education quality is low

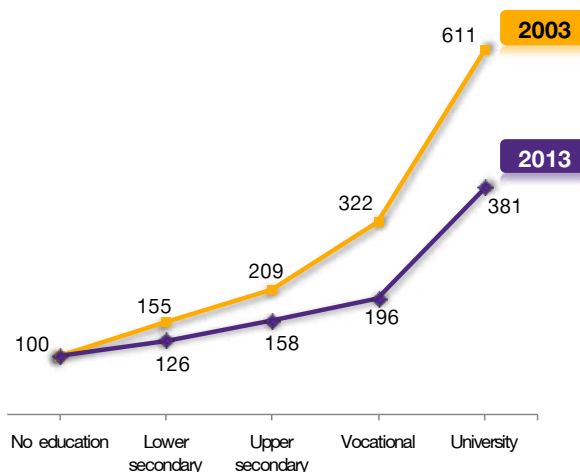
The quality of university graduates has fallen significantly in recent years, which is reflected in a decline in the pay premium they earn above graduates with lesser degrees, such as from vocational institutes. This premium has declined by 40% over the last decade. In 2003, for example, university graduates received 6 times the compensation of workers with no schooling, compared to just 4 times today. (Figure 10)

The World Economic Forum's Global Competitiveness Report rates Thai universities lower than those of competing countries. In 2014, Thailand ranked 87th in the quality of its universities, below Malaysia, Indonesia and the Philippines. Similarly, Thailand performs worse in mathematics and science education.

10 The quality of Thai universities has declined over the last decade.

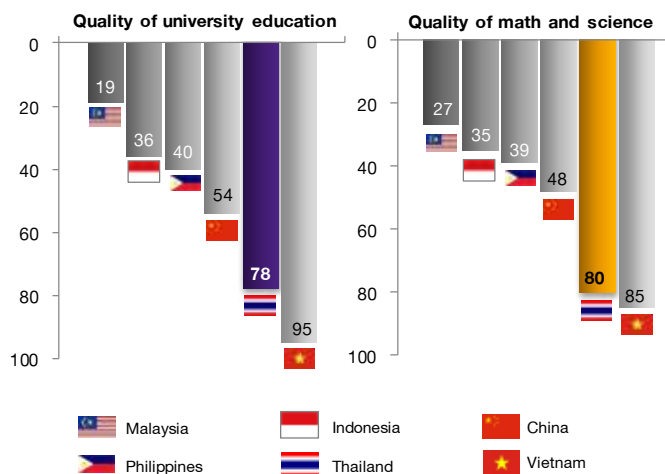
Salary comparison for different education levels 2003 vs. 2013

Unit: index (no education = 100)



Rankings of education quality, 2013

WEF rankings of competitiveness
(Higher number = lower competitiveness)

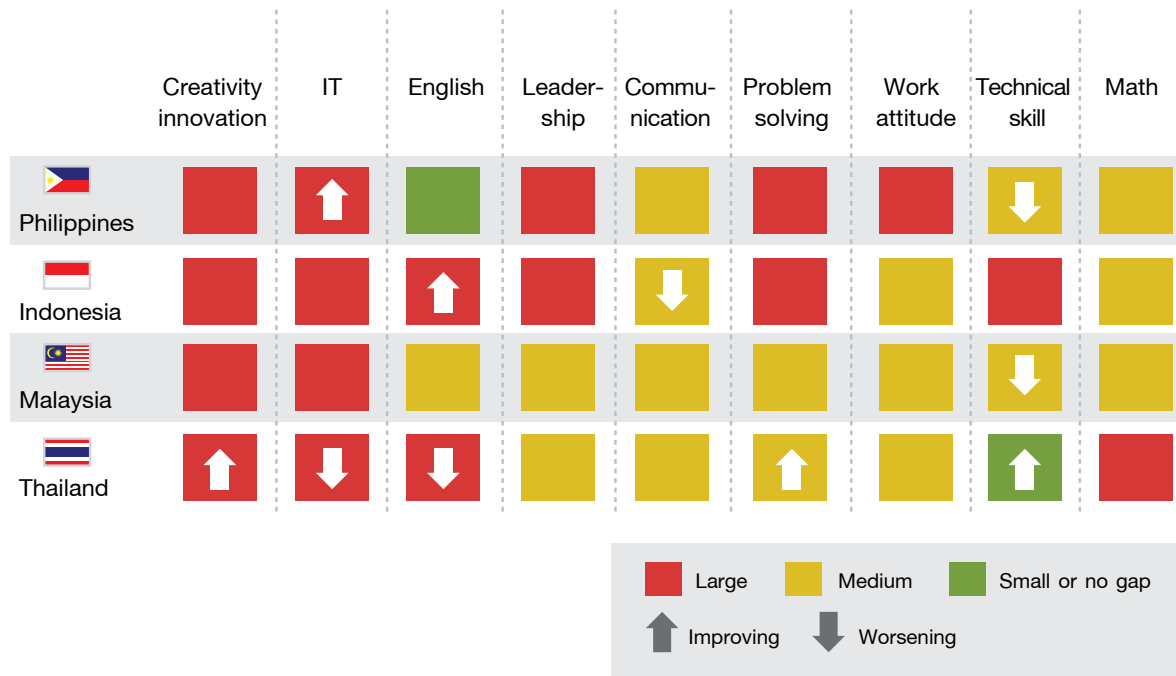


Source: EIC analysis based on data from LFS and WEF

Even professional-level candidates lack many skills required by employers. According to a World Bank survey published in 2007, Thai professionals perform poorly in creativity, innovation, IT, English language and mathematics. The workforce’s skills in English and IT have been trending down, whereas workers in Malaysia, the Philippines and some other ASEAN countries perform much better on these points. This probably means that the AEC will result in Filipinos replacing many Thai workers in sectors like hotels and tourism, which require English proficiency (Figure 11).

11 Thai employers indicate skill gaps in creativity, IT skills, English and mathematic proficiency.

Comparing skill gaps among ASEAN professionals



Source: EIC analysis based on data from World Bank

3.2 Thai schools and universities emphasize general education instead of vocational training, engineering and science.

Dimension 1: General education crowds out vocational training

Vocational students account for only 20% of all students in post-secondary education in Thailand, a very low fraction compared to other countries like Malaysia (50%), South Korea (45%) and Indonesia (30%). This is a worrying figure, because employers actually have a greater need for vocational workers, with their practical training, than for graduates of universities (Figure 12).

Dimension 2: University students opt for “soft” subjects that are less useful to employers

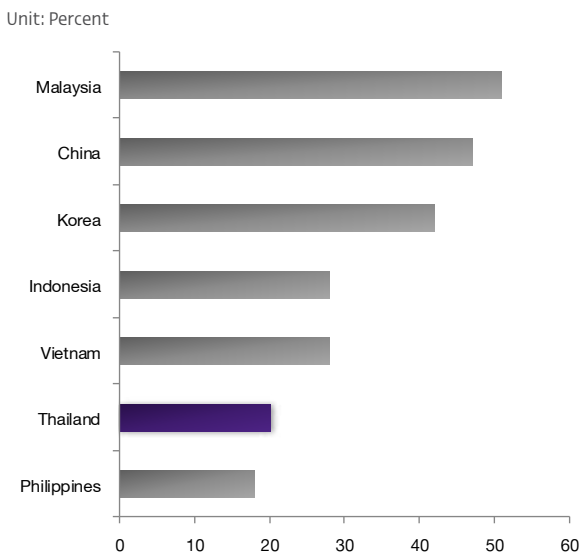
Among Thai university students, those pursuing degrees in the social sciences, business and law account for 45% of all, compared to 20% in engineering and sciences. In more developed Asian countries, the specializations are distributed more evenly. In South Korea, for example, students of engineering account for 27% of all students, the most of any field. In Japan, just 28% study social sciences, business and law, a much lower share than in Thailand (Figure 12).

A better balance among students in different fields would help the Thai workforce better adjust to the labor market's changing needs. Moreover, Thailand's sheer lack of enough engineering and science graduates will limit growth of the manufacturing sector.

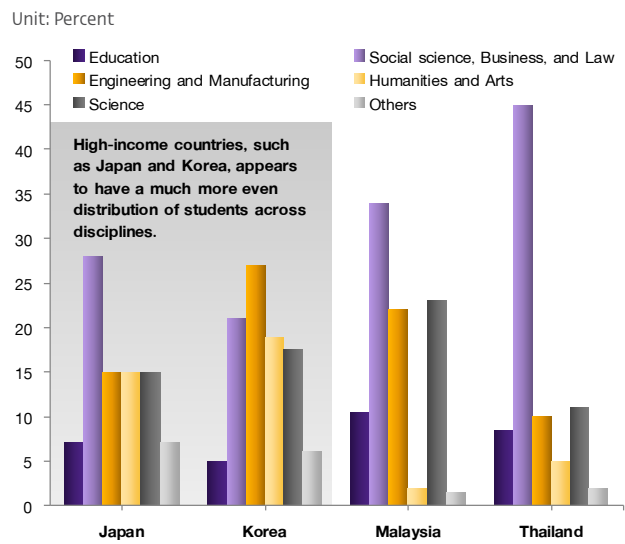


12 Thailand exhibits small fraction of students in vocational education and a concentration of students in social sciences, business, and law.

Share of tertiary students enrolled in vocational schools



Proportion of tertiary enrollment, by field of study



Source: EIC analysis based on data from World Bank

The labor shortages arising from these three factors reduce the productive potential of many businesses and the economy as a whole. Economists measure this productive capacity as “growth potential,” which means the highest level of growth possible given the economy’s current structure and inputs, factoring out incidental influences like unusual weather, natural disaster, political unrest or war. By definition, the labor gap reduces Thailand’s GDP growth potential because labor is one of the key inputs that determine economic output, together with cumulative capital, human capital (skills and education) and total factor productivity. As for companies, they are affected differently according to which industry they are in, as explained in the next chapter.



2

Impact on the economy and major industries

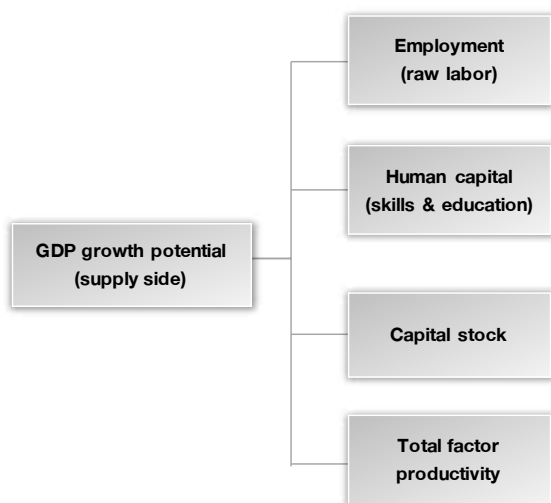
Labor shortage will have a widespread impact on the Thai economy especially on the potential GDP growth and competitiveness. For industries, the effects vary depending on the contributing factors as discussed in chapter 1. In the medium term, construction is likely to suffer most from the sheer lack of workers. Car makers, on the other hand, are pressured by qualitative gaps because these companies need scarce vocational workers and science and engineering graduates both quantitative and qualitative shortages of labor.

Impact of labor shortage on the Thai economy

Thailand's labor shortages, whether caused by too few workers, poor education or too little labor saving investment, are reducing the economy's capacity to grow. They have contributed to the decline in Thailand's potential growth rate to just 3-4% for the past five to six years, down from 5% in the early 2000s¹ (Figure 13).

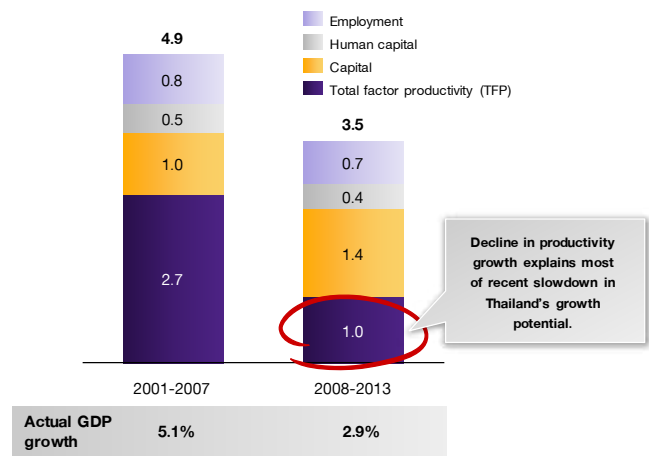
13 Employment in six key industries accounts for 56% of non-agricultural workforce.

Factors in potential growth



Thai economy has undergone a structural change

Potential output growth (unit: %)



Source: EIC analysis based on data from NESDB, LFS, and Barro-Lee dataset.

Solving labor shortages will increase the nation's growth potential. Although Thailand's demographic shift cannot be changed, other labor supply factors can be improved. It's mostly a matter of ramping up investment in productivity and optimizing management of human resources.

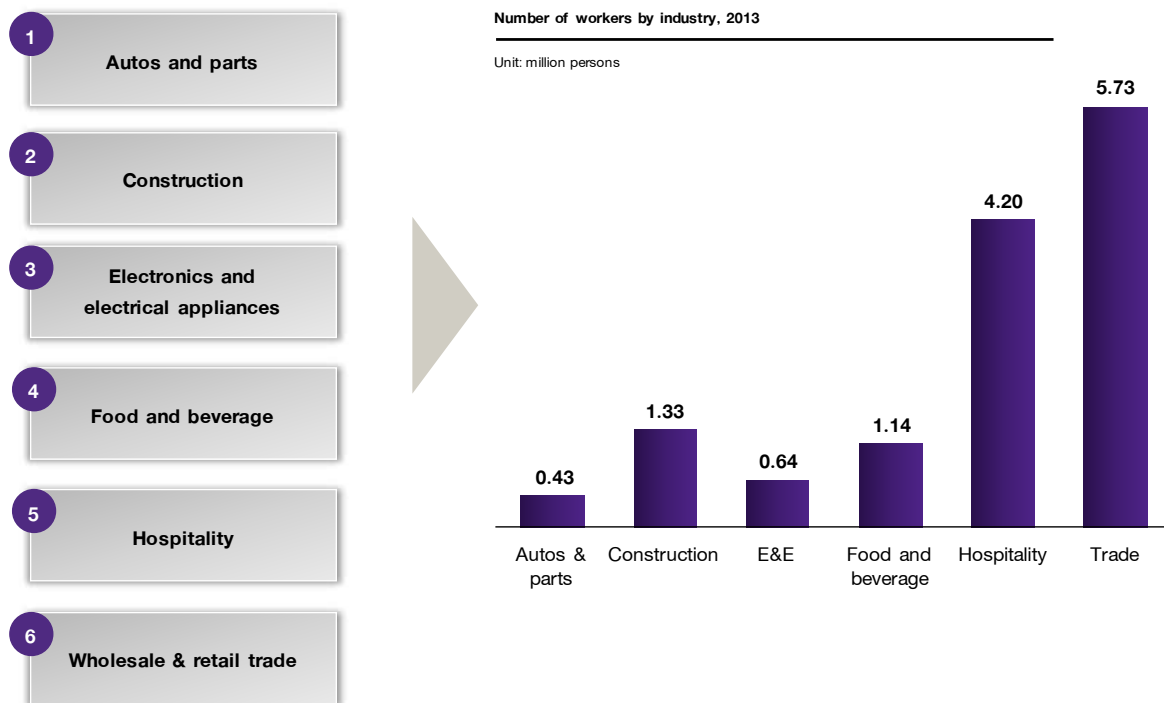
¹ In estimating potential growth of an economy, economists consider the supply of production factors: 1) labor force, which reflects the growth of population in labor force and unemployment rate, 2) human capital (skills and education), 3) capital accumulation, which is a result of public and private investment, and 4) total factor productivity (TFP) which reflects the efficiency in natural resource utilization.

Different industries, different labor gaps

To see how different industries are affected by labor shortages, EIC looked at both qualitative and quantitative gaps. The industry most suffering from a lack in numbers of workers, at least in the medium-term, is construction. Carmakers, on the other hand, are more pressured by qualitative gaps, because these companies need scarce vocational workers and science and engineering graduates with special skills and knowledge. Makers of electronics and electrical appliances suffer greatly from both quantitative and qualitative shortages of labor.

EIC's study examines six key industries: automobiles & parts, construction, electronics & electrical appliances, food & beverages, hospitality and wholesale/retail. These industries employed 13.5 million people in 2013, or 56% of Thailand's non-agricultural workers (Figure 14). They produce 35% of GDP (Figure 15). Most importantly, these industries contributed over 80% of Thailand's growth in GDP during 2008-2012. Any factors hindering these sectors therefore merit close attention.

14 Six industries considered in this study are the main driving force of Thailand's economy.

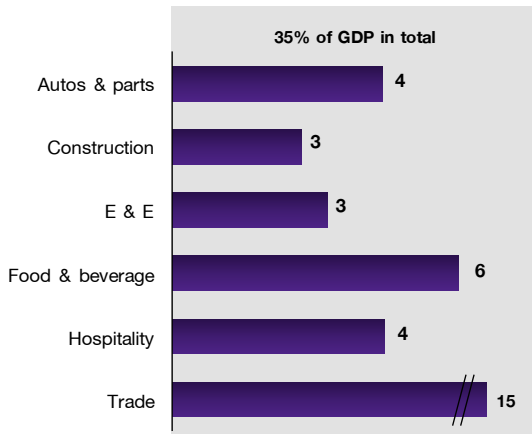


Source: EIC analysis based on data from LFS.

15 These industries are main engines of Thailand's economic growth

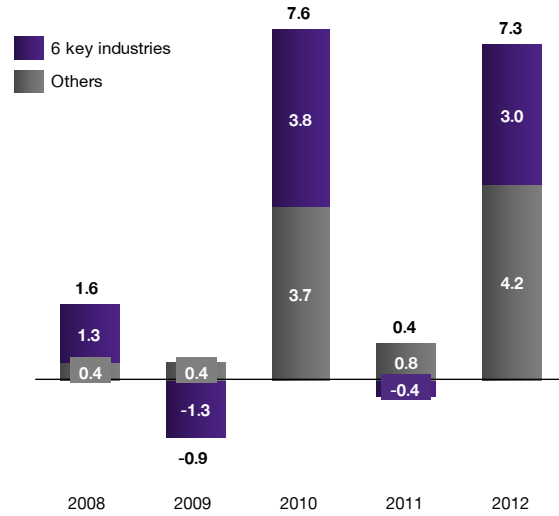
The 6 sectors contribute 35% of GDP..

Share of real GDP (2012,%)



...and over 80% of GDP growth during past 5 years.

Contribution to total growth, %



Source: EIC analysis based on data from NESDB.

EIC forecasts future trends in the Thai labor market on an industry-by-industry basis, so that each sector can prepare for possible shortages, both quantitative and qualitative.

① Quantitative labor gap – shortages caused by workforce shrinkage







The decline in the size of the labor pool will especially hinder labor-intensive industries, such as hospitality and construction.



Looking ahead, the labor gap will be most severe in industries with fast growth and those that are unable or unwilling to invest in labor saving technology. To estimate these gaps, EIC looked at five-year growth forecasts for each of the six key industries. Businesses with fast growth in demand will need to hire faster. But they can reduce the need by increasing labor productivity.

Figure 16 shows that the construction sector will grow fastest, at 27%, or 2.4 trillion baht in value, due to the government's massive infrastructure plans. Strong demand growth will also drive wholesale and retail trade, hospitality, and automobiles & parts, which will surely need more workers. To meet demand, these four sectors will almost certainly need to increase investment in technology to boost productivity.

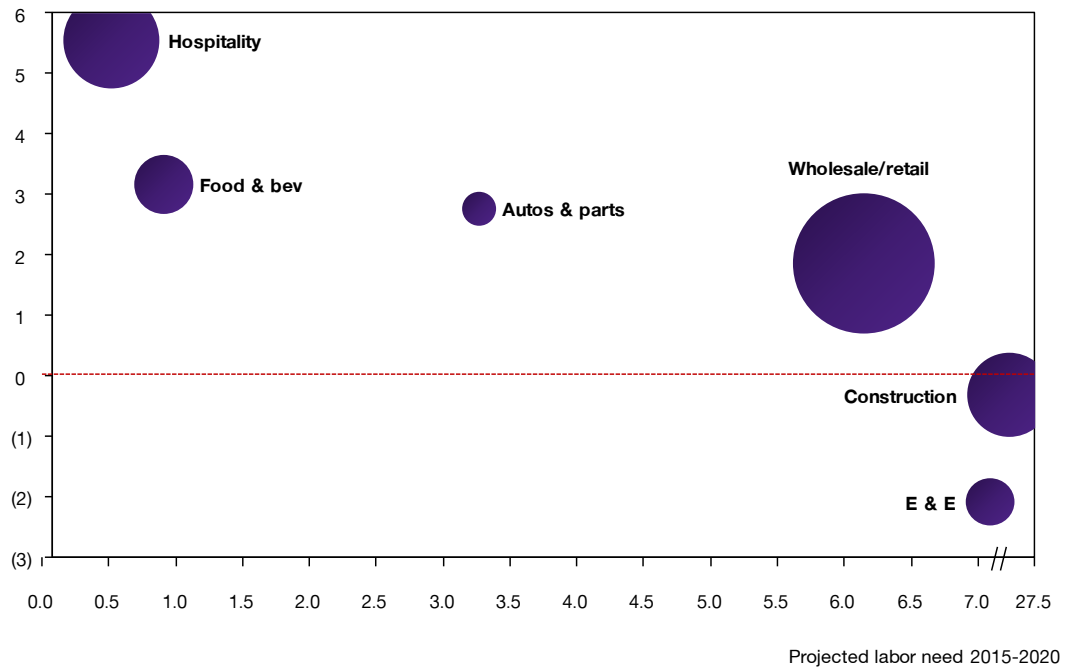
16 The 6 key industries will grow faster during next 7 years

	% of GDP in 2012	Revenue growth 2008-2012	Growth projection 2014-2020
 Autos and parts	4%	4%	6%
 Construction	3%	3%	27%
 E & E	3%	-3%	5%
 Food & bev	6%	3%	4%
 Hospitality	4%	6%	6%
 Wholesale & retail	15%	2%	8%

Source: EIC analysis based on data from NESDB

17 Construction and E&E sectors are most likely to experience labor shortage.

Productivity growth trend



Source: EIC Analysis based on data from BOT and other official sources

2 Qualitative labor shortages – the gap in skills

A lack of high-skill workers and workers with specialized skill sets also plagues various sectors. EIC analyzed the skills gap in each industry by examining the demand for labor at different levels of education.



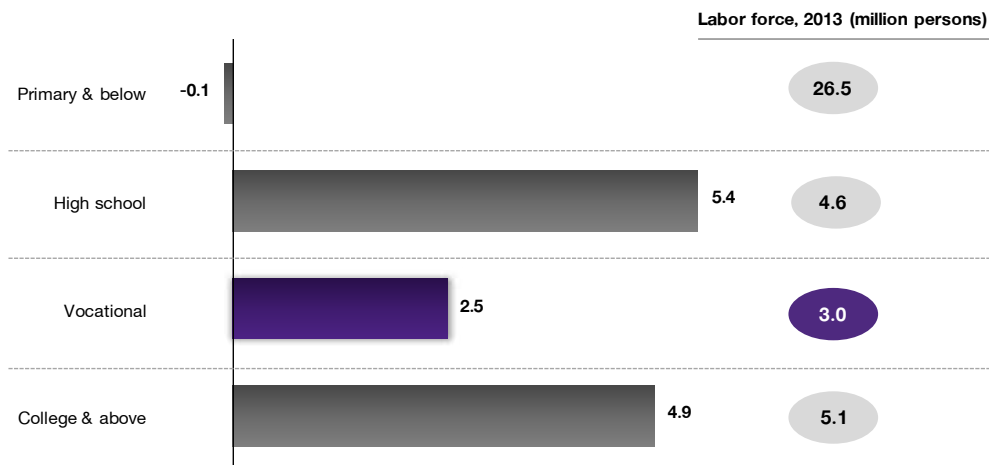
1. Despite an overall rise in educational attainment among Thai workers, the vocationally trained labor force is growing too slowly.

The manufacturing-intensive economy of Thailand today relies heavily on exports of such industrial goods as automobiles and electrical appliances. These industries need lots of workers with skills at the intermediate level, especially from vocational training. Unluckily, Thais have a higher esteem for general education, which not surprisingly is the focus of the nation's schools and universities. The system keeps pumping out lots of generalists and humanists, even though businesses instead need lots of specialists and technicians. Figure shows that the growth rate of the vocationally trained labor force is just half of the growth in high-school graduates and university graduates.

18 Thai workforce is getting more educated, but growth of vocational training is too slow

Growth of labor force by level of education, 2002-2013

Unit: CAGR (%)



Source: EIC analysis based on data from LFS

The electronics & electrical appliances industry and the wholesale/retail sector face shortages in medium-to-high skill workers as well as vocationally trained workers.

The construction sector will have the highest labor demand growth during the next five years, but 80% of the jobs are unskilled (Figure 19). This need can be met during the short term by migrant workers from Cambodia, Myanmar and Laos.

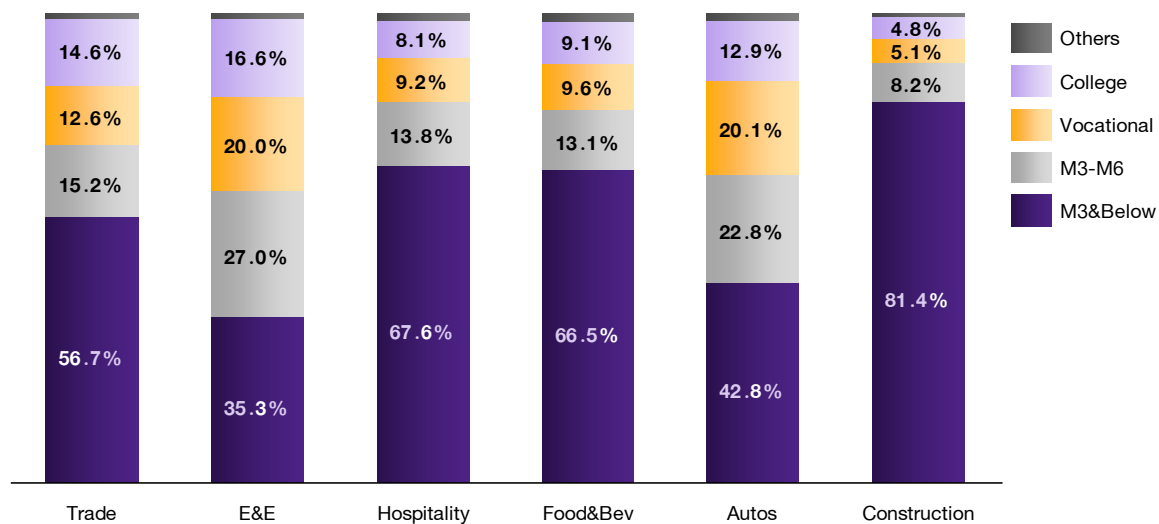
But in the long term, a rise in living standards, jobs and wages in these countries will draw their émigré workers back home. And in the meantime, construction companies that rely heavily on migrant workers may be prone to shocks, as when tens of thousands of Cambodian workers fled Thailand in 2014 following rumors of a government crackdown on migrants. Likewise, businesses in the hospitality as well as food and beverage sectors are vulnerable to any decline in Thailand's influx of low-skilled migrants.

The electronics & electrical appliances and wholesale/retail industries are pressured by their need for intermediate-skill staff, especially vocational workers. Migrant workers generally cannot fill these positions, and training new hires takes time.

19 Share of workers by education level across industries

Share of workers by education levels across industries

Unit: % of workers employed



Source: EIC analysis based on data from LFS 2013

BOX: The German edge: closing the skills gap with apprenticeships

Thailand's economic journey from its past emphasis on agriculture toward its current focus on export manufacturing follows in the footsteps of many other countries before, and none more successful than Germany and Japan. In all three countries, cars, electronics and electrical appliances are a big part of exports. And this means a big need for medium-to-high skill labor.

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Even though the structure of Thai industry resembles that of Germany and Japan, Thailand's education system is modeled on that of the United Kingdom and the United States, focused on liberal arts and general learning rather than job-specific skills. And in Thai society, a university diploma earns prestige. This system does succeed in producing plenty of generalist workers who offer flexibility, but it doesn't much help Thailand's key export industries.

Given the looming shortage of labor, it is now time to emphasize development of Thailand's vocational schools. One promising model is Germany's "dual-educational" system, which requires students to undertake apprenticeships at companies in addition to receiving vocational training at school². Thanks to this system, Germany has a relatively low level of youth unemployment, and German industry gains high competitiveness from having plenty of skilled workers³.

This system is the predominant feature of higher education in Germany, where almost 60 percent of young people enroll in apprenticeship programs in such diverse fields as engineering, IT, banking and hospitality. Each industry has its own carefully coordinated apprenticeship program distributed among many firms. Standards are high to ensure quality. Students rotate among different firms in their industry and also spend some time training in a more centralized organization, such as a trade union⁴. All in all, the system makes for a smooth transition from school to industry.

Several German and Japanese manufacturers operating in Thailand have begun to roll out this system here. Among the companies offering apprenticeships are Mercedes-Benz, BMW and Denso Corp. The two-year program combines classroom courses with hands-on learning on the shop floor and in corporate training centers. Each student gets a full scholarship, minimum-wage salary, employee benefits, and, most importantly, a job offer at the end of the training. But many more companies need to join this program in order to close Thailand's big skills gap.

² Kahlenberg, Christoph, and Alexander Spermann. (2012). How could Germany escape the demographic trap? Institute for the Study of Labor (IZA) Policy Paper No. 48.

³ Lerman, Robert. (2013). Skill Development in Middle Level Occupations: The Role of Apprenticeship Training. Institute for the Study of Labor (IZA) Policy Paper No. 61.

⁴ Disbbusch, Heiner and Peter Birke (2012). Trade Unions in Germany. Berlin: friedrich Ebert Stiftung 2012.

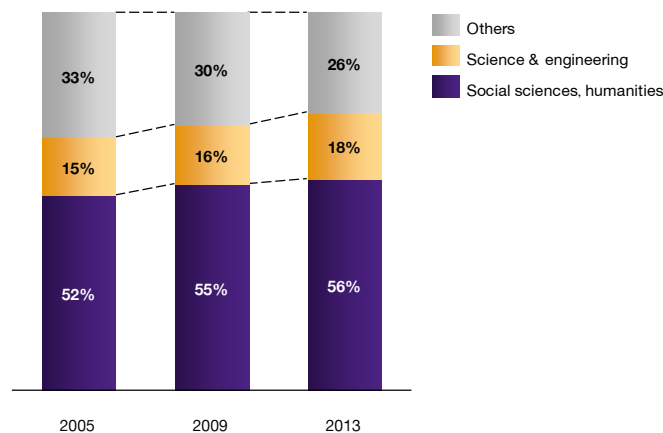
2. Most university graduates studied social sciences and humanities, creating a lack of the science and engineering graduates needed by makers of cars and electronics.

Relatively few of Thailand's workers with university degrees studied sciences and engineering (Figure 20). This will lead to a severe labor crunch for Thailand's top two export industries, which are automotives and electronics and electrical appliances. It will hinder their growth and limit their ability to keep up with changing technologies (Figure 21).

20 Share of tertiary-educated workers by field of study

Share of university-educated workers by fields of study

Unit: % of all university-educated workers



Source: EIC analysis based on data from LFS



3

Closing your company's labor gap

EIC recommends three basic ways that businesses can prevent labor shortfalls:

- 1) Revamp hiring: Enhance recruitment networks and processes; hire foreigners; beef up pay and benefits.
- 2) Improve worker productivity: Increase the use of machinery and technology; redesign work processes; establish or revamp training programs.
- 3) Enhance retention: Improve employee satisfaction and engagement.

To discover solutions, EIC interviewed SMEs and large corporates in the sectors most likely to suffer labor gaps: autos & parts; construction; electronics & electrical appliances; food & beverage; hospitality; and wholesale & retail. We supplemented our interview findings with analytical research.

1. Revamp hiring

Ensuring a high intake of new recruits is critical. Companies should revamp their recruiting approach, adding a wide variety of measures to bring in candidates and then successfully hire them. Improving recruitment networks and processes will help reach more people. Enhancing compensation and benefits will increase the number of successful hires.

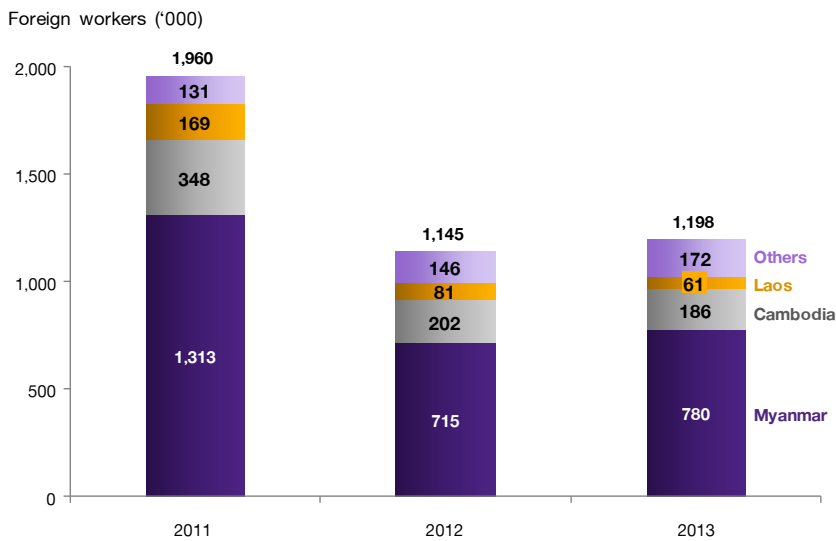
Many SMEs have widened their recruitment pool by advertising positions on job websites. Online recruitment is a great tool for firms with limited financial resources and manpower. And larger companies, such as Bar-B-Q Plaza, Thailand's biggest chain of grill restaurants, also recruit online. Other activities help the company broaden its hiring, such as recruitment visits to neighborhoods and communities. In the past, the company simply relied on walk-ins to fill positions; today a more proactive outreach is needed.

Betagro, a key player in Thailand's agro-food industry, engaged in animal feed production, livestock farming and food processing, also works on expanding its hiring network. It enlists recruitment help from village headmen, known as kamnan, กำนัน, the well-connected local leaders who are the most important grass-roots officials throughout Thailand.

Some companies use third-party subcontractors to increase headcount. This method costs slightly more than in-house recruiting, but helps firms more rapidly source staff with the right skills for the job. Kang Yong Electric, Thailand's manufacturer of Mitsubishi Electric home appliances, uses this approach.

A crucial source of labor which Thai firms rely on, especially for unskilled labor, is foreign workers. These workers are typically from neighboring countries such as Myanmar, Laos and Cambodia. Together they account for 86% of the 1.2 million registered foreign workers in Thailand. Most are employed in the construction, agriculture and services sectors.

21 Foreign workers by country of origin



Source: EIC analysis based on data from Office of Foreign Workers Administration

Betagro relies on some 3,000 foreign workers, or 15% of its unskilled labor force of 20,000 people. Kang Yong Electric also depends on migrants, working with Thailand's Ministry of Labor to source workers directly from Cambodia. The bureaucratic process of bringing in a migrant worker from Cambodia takes two months, so manpower planning is critical to prevent gaps.

Some firms go the extra mile by collaborating with vocational schools at both the secondary and post-secondary levels to not only recruit students but design curriculums and work-study programs tailored to their needs. This ensures that the schools are able to funnel students with the right skillsets to prospective employers. It also lets the firms themselves evaluate potential hires even before the formal recruiting process begins.

Betagro, for example, arranges for schools to offer food safety courses that teach the specific knowledge and skillsets needed at food processing plants. Betagro also provides work-study programs at vocational schools during which students spend half their time in the classroom, and the other half in jobs and training at Betagro. The company pays students a small wage during this time. Betagro even pays tuition in the case of students at post-secondary vocational institutes. The company also guarantees them employment under a one-year contract. Betagro's work-study program now has some 60 students, taught by two agricultural institutes. The company plans to expand the program to encompass 300 students at 10 agricultural and engineering schools.

SMEs and other companies that might lack the financial or human resources to singlehandedly strike up partnerships with vocational institutes can nevertheless enlist schools by joining with other firms in their own industry or with firms needing graduates with similar skillsets. Forming a consortium of firms can enable small players to work with vocational schools and gain a greater say in negotiations and designing curriculums. This approach also helps by generating more interest among students because it gives them access to more employment options upon graduation.

An especially effective model of corporate collaboration with vocational schools is Germany's dual-educational system, which combines job apprenticeships with classes (see BOX: The German edge: closing the skills gap with apprenticeships) Several German-affiliated companies are introducing this approach now in Thailand.

Some Thai companies have set up their own schools to source new recruits. Charoen Pokphand established Panyapiwat Technological College for vocational training and Panyapiwat Institute of Management for university-level courses. CP sends its own employees to the schools as part of a work-study program. The Regent Group, owner of Regent Cha-Am Beach Resort, recently set up a hospitality school to train staff for its own property and for other recruiters.

Increasing pay and benefits is a common recruitment tactic. Raising base salaries and over-time pay above the market rate can help attract workers. Thai Rung Union Car, a leading manufacturer of car parts, has chosen to raise salaries for semi-skilled workers toward the same level as college graduates. Other sweeteners, such as provident fund contributions, can motivate recruits. Cash-strapped SMEs and firms in industries with tight profit margins can provide non-monetary benefits such as free meals, accommodations, transportation or medical care. Some reduce working hours to attract employees seeking work-life balance.

In industries where project schedules mean downtime that interrupts pay, some firms monitor staff work hours to ensure continuous employment and steady income. Pre-Built, a leading construction firm, follows this practice. Construction workers typically have to seek new work whenever they finish a project, and during the interim receive no pay. Pre-Built manages its projects so that workers get transferred from site to site as they are finished. This ensures that workers get a full month of wages on a steady basis, with no unpaid downtime.

Pre-Built also attracts workers by incentivizing and rewarding staff for productivity. For example, workers are paid a fixed wage to complete a certain task in a set number of days. If they manage to finish the task early, they continue to be paid the same fixed wage until the end of the scheduled period, but can opt to either rest or find other tasks to complete for additional pay.

2. Improve worker productivity

When more hands can't be hired, it pays to get more productivity from every employee you have.

One way is to increase the use of machinery and technology. Betagro relies heavily on automation to reduce labor needs in meatpacking. For example, it has set up automated machinery to clean carcasses, which has reduced the number of workers required for the task from 50 to 1. It also deploys conveyor belt and auto-packing systems. Kang Yong Electric has added new machinery and upgraded production lines and software to increase speed and reduce manpower needs. Real estate and construction firms have been investing heavily in prefabrication technology. It takes 8-10 months to build a 200 sqm house using traditional construction methods, but prefabrication cuts the construction time to 4-5 months, halving the need for construction workers. Sansiri and Property Perfect both have prefabrication plants, while CH. Karnchang has switched to using prefabricated materials and heavy machinery.

Another way to enhance labor productivity is to redesign processes to reduce the need for manpower. Pre-Built has redesigned its construction process so that workers focus on completing structural work and brick work three floors at a time, instead of finishing a building's entire structural work before laying bricks. This allows use of fewer workers, reducing the need for labor by 30%. Bar-B-Q Plaza has simplified processes to reduce redundancy and shorten turnaround time. For example, by keeping sauce containers on all customer tables to allow self-service, they have reduced the need for wait-staff. Redesigning processes is an extremely cost-effective way to increase productivity, so it makes sense for SMEs in particular.

In-house training programs can improve staff productivity. Kang Yong Electric provides classroom and on-the-job technical training programs for its workers. It also provides opportunities for high performing staff to attend Mitsubishi's training seminars in Japan. Betagro provides formal training to its workers, including unskilled ones, so that they can improve efficiency and graduate to more complex tasks. This enables staff to get promoted and earn higher wages.

3. Enhance retention

Making sure employees are happy and committed to the firm is especially important when workers are scarce. It does not matter if a company manages to recruit huge numbers of workers and boost their productivity if the employees quickly leave. Companies need to monitor employee satisfaction and ensure that staff are happy, engaged and committed.







Some Thai firms take extra steps to boost job satisfaction in order to hold on to employees longer. Pre-Built surveys its workforce to identify their job “pain points.” It discovered that employees want easy access to meals and medical care on the job as well as stable finances. The company duly brought in meal trucks and arranged for transportation to hospitals. It optimized work scheduling so that staff can be redeployed as soon as a project is completed. That way they have no unpaid downtime.

Betagro has set up several programs to enhance employee satisfaction. It established social clubs and mentorship programs as well as teambuilding and CSR activities. It also offers training in financial planning. One of the main pain points among Betagro’s vocational school graduates was lack of clarity regarding their future career paths, so the company responded by providing better planning and communications.

There is no “one size fits all” solution to the labor gap. Different types of businesses need different approaches. The determining factors are things like a company’s profit margin, the level of skills required, and the extent to which machinery and technology can be used. Businesses like construction that rely heavily on unskilled workers can hire migrants more easily than companies like carmakers that need technicians. The automotive and electronics industries are much better positioned to deploy technology and automation than are services like hotels & restaurants, where jobs involve interacting with customers and performing a wide variety of manual tasks.

The following table shows which solutions are best for each industry.

22 Identifying applicable initiatives to mitigate the effects of labor shortage

Goal	Strategy	Specific tactics and measures	Sectors					
			 Automotive	 Construction	 E & E	 F & B	 Hospitality	 Wholesale & retail
Attract and recruit more employees	Enhance recruitment network & processes	Collaborate with vocational schools to design curriculum and set up work-study program	☆☆	☆	☆☆	☆	☆☆	☆
	Increase benefits	Increase salary; provide free meals & transport	☆	☆	☆	☆	☆	☆
	Use foreign labor	Hire migrants from neighboring countries		☆☆	☆		☆	☆
Improve worker productivity	Enhance training	Provide formal technical training	☆	☆	☆	☆	☆	
	Increase use of machinery & technology	Establish or upgrade modern production line	☆☆	☆	☆☆	☆☆	☆	
	Redesign processes	Simplify processes to reduce manpower needs	☆	☆	☆	☆	☆	☆
Increase staff retention	Enhance employee satisfaction / engagement	Define career path; provide team-building activities	☆	☆	☆	☆	☆☆	☆☆

Source: EIC analysis

To remedy the labor gap, a company should adopt a three-pronged approach that results in hiring more, improving efficiency and increasing staff retention. A company needs to have enough new recruits, give employees the right tools and skills to work better, and ensure that staff are happy and committed.

A good way to begin the process is to talk with staff and potential hires to learn how to widen the recruitment pool and provide the right incentives. Companies should assess their training programs, business processes and systems, benchmarking them against peers to discover which points need improvement.

As for employee satisfaction and engagement, firms should conduct surveys and discussions to gauge the current conditions, identify pain points and learn how to improve. By simultaneously taking action on all three fronts, a company can build a sustainable and productive workforce that will weather the worker shortages that are already hindering industry and likely to worsen.

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