

Digital connectivity in accounting: A boost to the Belt and Road Initiative

About ACCA

ACCA (the Association of Chartered Certified Accountants) is the global body for professional accountants, offering business-relevant, first-choice qualifications to people of application, ability and ambition around the world who seek a rewarding career in accountancy, finance and management.

ACCA supports its **208,000** members and **503,000** students in **179** countries, helping them to develop successful careers in accounting and business, with the skills required by employers. ACCA works through a network of **104** offices and centres and more than **7,300** Approved Employers worldwide, who provide high standards of employee learning and development. Through its public interest remit, ACCA promotes appropriate regulation of accounting and conducts relevant research to ensure accountancy continues to grow in reputation and influence.

ACCA is currently introducing major innovations to its flagship qualification to ensure its members and future members continue to be the most valued, up to date and sought-after accountancy professionals globally.

Founded in 1904, ACCA has consistently held unique core values: opportunity, diversity, innovation, integrity and accountability.

More information is here: www.accaglobal.com

Contents

Preface	4
Executive summary	6
1. Companies that have business along the B&R routes	9
(I) The profile of individual respondents	9
(II) The profile of company respondents	10
(III) Companies surveyed for this research	11
2. Accounting informatisation	14
(I) The status of accounting informatisation	14
(II) Values and challenges of accounting informatisation	18
(III) Demands for accounting informatisation	24
(IV) The development of accounting informatisation	27
3. Digital competencies and training of accounting talents	30
(I) Respondents' understanding of the technical domains	30
(II) Training methods in digital competencies of accounting talents	32
4. Implications of the US administration's tax reform plan and the BEPS Action Plan	34
(I) Implications of the US administration's tax reform plan to the tax burdens and investments along the B&R routes	34
(II) Implications of the BEPS action plan for the tax burdens and investments along the B&R routes	36
(III) Outlook for tax policies that enhance corporate investment enthusiasm	38
Acknowledgement	39
Research team	39

Preface



SNAI
上海国家会计学院
Shanghai National Accounting Institute

The construction of the Belt & Road brings huge blessings to the countries along the B&R routes and at the same time, needs to involve every roletaker. A joint seminar on 'accounting infrastructure: a booster to the Belt and Road Initiative' was successfully held by SNAI with the Accounting Society of China, ACCA, and Deloitte China in July, 2017. In light of the significance of accounting infrastructure in the trade and capital flow of BRI, we decided to jointly build the Belt and Road Research Center and conduct serial research on the cooperation of accounting infrastructure in the BRI. The theme for the 2018 research is 'digital connectivity in the Belt and Road'. We think that on the one hand, the construction of accounting infrastructure needs to be aligned with

the development of the Belt and Road, which calls for the transparency and sharing of international accounting data; on the other hand, the ever-changing information technology is paving the way for boosting the Belt and Road, and it requires people to catch up with the up-to-date digital trends and methods. This report is presented by SNAI, ACCA and Yonyou on challenges of corporates operating along the B&R routes. We are truly thankful to all respondents, sponsors and research partners. We are also looking forward to the upcoming research from the Belt and Road Research Center in response to the BRI.

Professor Li Kouqing
Dean, SNAI



ACCA Think Ahead

For every enterprise, data is the new ultimate super power. But it is only powerful if it can be shared and understood.

In this, the second major Belt and Road Initiative report from SNAI and ACCA, we are exploring the digital infrastructure and connectivity that the BRI will need to thrive. To do this, we have also worked with a new research partner, Yonyou Group, on this project.

One of BRI's key objectives is to stimulate international economic cooperation across the 65 countries on its path – and beyond. This relies on information and data being shared across entities and borders quickly and efficiently. And this can only happen if digital development is progressing at the same pace across nations involved, not least in the space of digital accounting infrastructure.

In addition to the right digital accounting ecosystem and oversight, we need professional accountants who have in-built digital understanding and

appreciation. In 2016, ACCA published our ground-breaking report *Professional accountants – the future: Drivers of change and future skills* where we isolated the seven professional quotients all qualified accountants will need to develop. These professional quotients are a collection of technical knowledge, skills and abilities, combined with interpersonal behaviours and qualities.

The Digital Quotient – the awareness and application of existing and emerging digital technologies, capabilities, practices and strategies – is one of these seven key areas and ACCA is committed to ensuring our members and future members can navigate all the opportunities a digitally enabled accountancy profession presents. In this way, we hope both ACCA and our members can play a major role in developing a Digital Silk Road that enables BRI to reach its full economic potential.

Helen Brand OBE
Chief Executive, ACCA



用友
yonyou

Policy coordination, infrastructure connectivity, unimpeded trade, financial integration, and people-to-people bonds are the five major goals of the Belt and Road Initiative (BRI). Among these, infrastructure connectivity is a priority. The research 'Digital Connectivity Along the B&R Routes', jointly conducted by Shanghai National Accounting Institute (SNAI), ACCA and Yonyou, provides important reference for the discussion on how to realise digital connectivity along the B&R routes and promote connectivity of accounting systems.

In response to the concerns of enterprises operating along the B&R routes, I would like to share with you some of my opinions.

First, efforts should be made to quicken the pace of digitalisation on the BRI to pave the way for connectivity. The connectivity of accounting and business languages is urgently needed for regional economic cooperation and trade activities along the B&R routes.

Second, the international application of accounting and financial management systems will rely on digitalised commercial application infrastructure and cloud service. For the Chinese enterprises going global on the BRI (90% of the respondents are Chinese companies), accounting and

financial management will be even more difficult in a multi-regional context with diversified economic situations.

Third, the establishment of corporate internal control systems will also see huge challenges. The first challenge lies in risk control and liquidity management. In the international context, capital-related business expands to investment, financing, foreign exchange, derivatives, risk hedge and hedging, global financial resource sharing, and financial institution relationship management. The globalisation of financing channels, diversification of financial assets, and fluctuation of interest rates and exchange rates will intensify at the same time. Therefore, it is necessary to build an internationalised global treasure system to manage all the capital through centralised collection, payment, investment, financing, risk control and allocation in order to improve the efficiency of fund operations and risk management. The second challenge rests in a changing tax landscape, as tax accounting and management needs to comply with local tax regulations. Given that, the tax service system should be able to support local tax data requirements and realise the connectivity of different tax systems.

Wang Wenjing
Chairman & CEO, Yonyou



Executive summary

The digital economy has become a key driving force for global economic growth. Enthused by the Belt and Road Initiative (BRI), more and more countries along the Belt and Road (B&R) routes have committed to enhancing their overall IT infrastructure in recognition of the digital economy as the new economic growth engine.

At the B&R Forum for International Cooperation held in May 2017, President Xi Jinping proposed strengthening cooperation in frontier areas such as the digital economy, artificial intelligence (AI), nanotechnology and quantum computing, and promoting the development of big data, cloud computing and smart cities, to build the Digital Silk Road of the 21st century. In April 2018, he further emphasised the opportunity presented by the BRI to strengthen cooperation in network infrastructure, the digital economy,

cybersecurity and other areas along the B&R routes so as to achieve economic objectives. The accounting infrastructure includes the accounting standards system, the accounting talent system and accounting regulatory system. The enhancement of the accounting infrastructure can provide strong support for BRI cooperation through accounting information interconnection along the B&R routes, and lower transaction costs in the processing of trade and capital flows. The rapid advance of digitalisation in accounting and relevant areas is an important part of building the Digital Silk Road. Digitalisation can greatly enhance intercompany accounting information connectivity and the connectivity between a company and its stakeholders, lay a solid foundation for accounting infrastructure, and promote cooperation along the B&R routes.

The research was sponsored and completed by the Belt and Road Accounting Research Center with the joint efforts of SNAI, ACCA and Yonyou.

The purpose of this research is to improve the breadth, depth and quality of digital interconnection along the Belt and Road routes by exploring ways of producing good accounting informatisation and responding to the digital competencies of accounting personnel and international moves towards tax reform. The questionnaire was jointly designed by the research team; it consisted of three sections, namely the production of accounting information, digital competencies of accounting personnel, and tax reform. It was produced as a web-based questionnaire by the SNAI Accounting Information Survey Center (<http://diaocha.esnai.com/6030001.aspx>), and issued to target groups, including SNAI's accounting leader trainees and students nationwide, ACCA members and partners, and corporate clients of Yonyou. The survey started on 4 April 2018 and ended on 28 April 2018, and a total of 257 valid questionnaires were received. Using statistical analysis of the survey data and call-backs to the respondents, the key findings can be summarised as follows.



(I) BUSINESS

There is enormous space for economic cooperation along the B&R routes, with more than 60% of the companies surveyed operating in the countries along the routes, while another 20% were intending to follow suit. More than 71% of the companies had set up fewer than 10 branches in the region, and were still in the early phase of their business expansion. South East Asia remains a key region for business along the B&R routes, with over 76% of the respondents having branches there. 'Infrastructure construction' remained the key area for those respondents investing along the B&R routes, accounting for around 37% of investment, followed by investment in plant construction, overseas market expansion, industrial manufacturing, financial services and outbound mergers and acquisitions, accounting for 16% to 22% respectively. 'Setting up overseas branches' is the main method used by companies to invest along the B&R routes, cited by nearly 70% of them, followed by 'taking over overseas projects' and 'acquiring overseas companies,' cited by 36% and 29% of the companies, respectively.

(II) ACCOUNTING INFORMATISATION

When asked about the 'current situation of accounting informatisation and application', companies going global responded that they were most concerned about the normal operation of accounting and financial modules (including financial accounting and financial reporting, accounting for 82% on average), followed by accounting internal control and risk management modules (such as funds management, travel expense management and budget management, accounting for 49% on average), with their third and fourth concerns being decision-making support modules (such as cost management and internal reporting management, accounting for 40% on average) and the modules for improving accounting operation efficiency (such as the shared finance platform, investment management, electronic accounting file management, performance management and electronic invoice management, etc.). The proportion of accounting information and application investment constitutes a parabola, with companies valued at USD 10 million making the highest proportion

of investment in accounting informatisation (37%), followed by companies valued at USD million (25%), USD 100 million (11%), and USD 100,000 (10%). 'Secondary development based on the original accounting information system of the company' was the main way for a business to implement accounting informatisation when carrying out BRI-related business, as done by nearly 55% of them, while 40% of the respondents claimed to 'directly use [their] existing accounting information systems', and about 60% used accounting information systems developed by overseas vendors.

As regards 'values and challenges of accounting informatisation and application', the companies surveyed argued that the core value of accounting informatisation and application is 'supporting regular business development' (cited by about 22%), followed by improving productivity/efficiency (cited by 13%), improving standardisation/quality, improving information quality, cutting costs and reducing operating risks (each cited by around 10%). The biggest barriers

for a business in promoting accounting informatisation and application were given as: 'the current accounting information systems are unable to support international business', 'overseas infrastructure such as utility, network and communications is not well-established', and 'the overseas accounting information systems [suffer from] lack of local software vendors' support', cited by 56%, 52% and 48% respectively.

When asked about areas where there was 'urgent demand for accounting informatisation and application', the top three 'urgently needed' functions cited were 'supporting accounting compliance in the overseas countries', 'supporting multiple accounting standards' and 'supporting multiple languages', cited by 79%, 72% and 65% of respondents respectively. The main factors cited as affecting the performance of accounting information systems were 'level of infrastructures such as the speed of networks in the overseas countries', 'performance of the accounting information systems', 'competencies of accounting information system users' and 'database performance', cited by 80%, 57%, 50% and 49% of the respondents, respectively.

When respondents were asked about 'the future development of accounting informatisation and application', big data and cloud computing were the new technologies attracting the most attention (both cited by over 71% of respondents), followed by mobile internet, data security technologies and artificial intelligence (each cited by between 40% and 48% of respondents). The companies argued that connectivity and consolidation across their accounting systems should be a priority (cited by 55% of them), including connectivity and consolidation within the financial accounting information system, the management accounting information system, the financial management information system, and across the above three systems. Next came connectivity

and data sharing between the business and accounting systems, cited by over 21%; and finally, connectivity between the internal management system and the business and accounting systems, as well as between the companies and external stakeholders, each cited by about 10% of respondents.

(III) DIGITAL COMPETENCY

The respondents had a general understanding of the technical domain, yet were well aware of the popular office automation software (such as Word and Excel), social media (such as WeChat and Weibo) and accounting information systems. They had a limited knowledge of emerging technologies, which, in order of familiarity, are big data (and data analysis technology); cloud computing; robotic process automation (RPA); Internet of Things (IoT); artificial intelligence (AI); and distributed ledger and cryptocurrency, both based on blockchain technology. When asked about the two blockchain-based technologies, the respondents stated that they knew very little, and over 35% of the respondents stated that they did not understand blockchain technology at all. The companies surveyed that were already engaged in BRI business knew much more about emerging technologies than companies that had not yet engaged.

Among the companies surveyed, the most common training methods in digital competencies of accounting personnel were professional qualification training, internal training and external training/use of forums. In general, there were no significant differences in training methods across different types of business. Facing evermore complicated technical application contexts and requirements, respondents were raising requirements for their own mastery of digital knowledge and skills. Respondents expected to upgrade their digital competencies through more systematic and comprehensive professional training.

(IV) THE US ADMINISTRATION'S TAX REFORM AND BEPS PLAN

In response to the US administration's Tax Reform Plan, around 44% of the respondents indicated that the countries in which they invested have had corresponding tax reforms, which involve corporate income tax, individual income tax, turnover tax and international taxation.

As a result, 31% of the respondents stated that their corporate tax burdens had risen or remained unchanged, and 38% had seen their tax burden decreased; 54% had increased investment, 39% said that their investment would remain unchanged, and only 7% had considered reducing investment. In response to the BEPS Action Plan, 67% of the respondents stated that the countries in which they invested have adjusted policies, with 37% of these citing the systems governing controlled foreign companies, while the proportion of those citing changes to transfer pricing, anti-abuse of tax treaties and mixed mismatches was around 30% for each. This has led to an increase in corporate tax burden for 34% of the companies and a decrease for 28% of them, with 38% seeing their tax burden unchanged; 41% of the companies had increased their investment, 48% had continued to invest as previously, and only about 10% intended to reduce investment.

Faced with the US administration's tax reform and the advancement of the BEPS Action Plan, as well as the implications for foreign investment decisions and the tax burdens of their businesses, companies expressed hope that the countries where they invest can reduce tax rates, offer tax incentives, enhance tax transparency, stability and legalisation, simplify tax collection and management procedures, and ameliorate law enforcement in order to increase corporate enthusiasm and confidence in outbound investment. At the same time, they expected China to improve its export tax rebate and subsidy system, strengthen international tax coordination, and eliminate duplicate taxation via tax treaties, so as to support globalising businesses.

Companies that have business along the B&R routes

(I) THE PROFILE OF INDIVIDUAL RESPONDENTS

1. Respondents by management level

Mid-tier and senior executives account for more than 71% of the respondents in the study. The mid-tier executives account for 45% of all the respondents, including accounting managers, investment operation managers, accounting informatisation managers, auditor generals and project managers; followed by senior executives, which account for 26%, including shareholders, presidents, partners, executive directors, full-time supervisors, general managers and chief accountants; the share of grass-roots employees among the respondents is similar to that of senior executives (about 23%), including finance, accounting, auditing, informatisation and investment positions; technical experts account for about 6% of all the respondents, including implementation advisers, consultant experts and legal advisers (Figure 1).

2. Respondents by familiarity with accounting informatisation

86% of respondents are well versed in accounting information (Figure 2). It is clear then that responses about accounting information in the rest of the questionnaire are highly reliable.

FIGURE 1: Respondents by management level

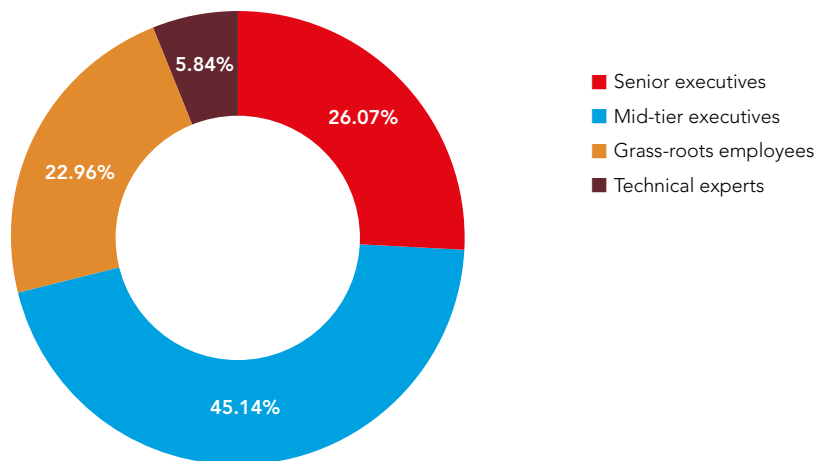
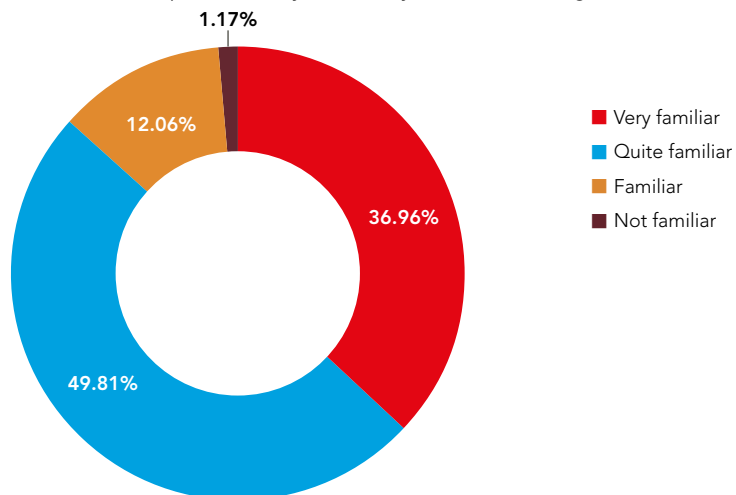


FIGURE 2: Respondents by familiarity with accounting informatisation



(II) THE PROFILE OF COMPANY RESPONDENTS

Company respondents refer to the ones where the individual respondents hold a position.

1. Respondents by country

Domestic enterprises account for 90% of the company respondents, including mainland China and Hong Kong companies; foreign enterprises account for 10%, mainly from the US, Europe (Germany, France, UK and Finland), South East Asia (Singapore and Indonesia), South Asia (India and Sri Lanka), Central Asia (Kazakhstan, Uzbekistan and Turkmenistan), Africa (Congo) and Russia (Figure 3).

2. Respondents by industry

The company respondents come from 15 industries, among which financial services, industrial manufacturing, engineering and construction, energy (including oil and gas), and science and technology top the list and account for 25%, 18%, 14%, 11% and 7% respectively. Other industries account for 16% collectively, including communication, software, consulting service, investment operation, as well as press and media industries (Figure 4).

FIGURE 3: Respondents by country

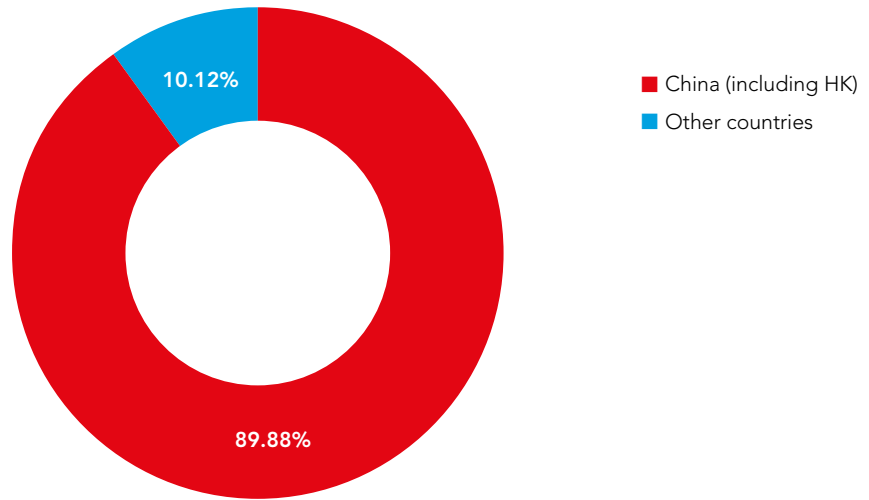
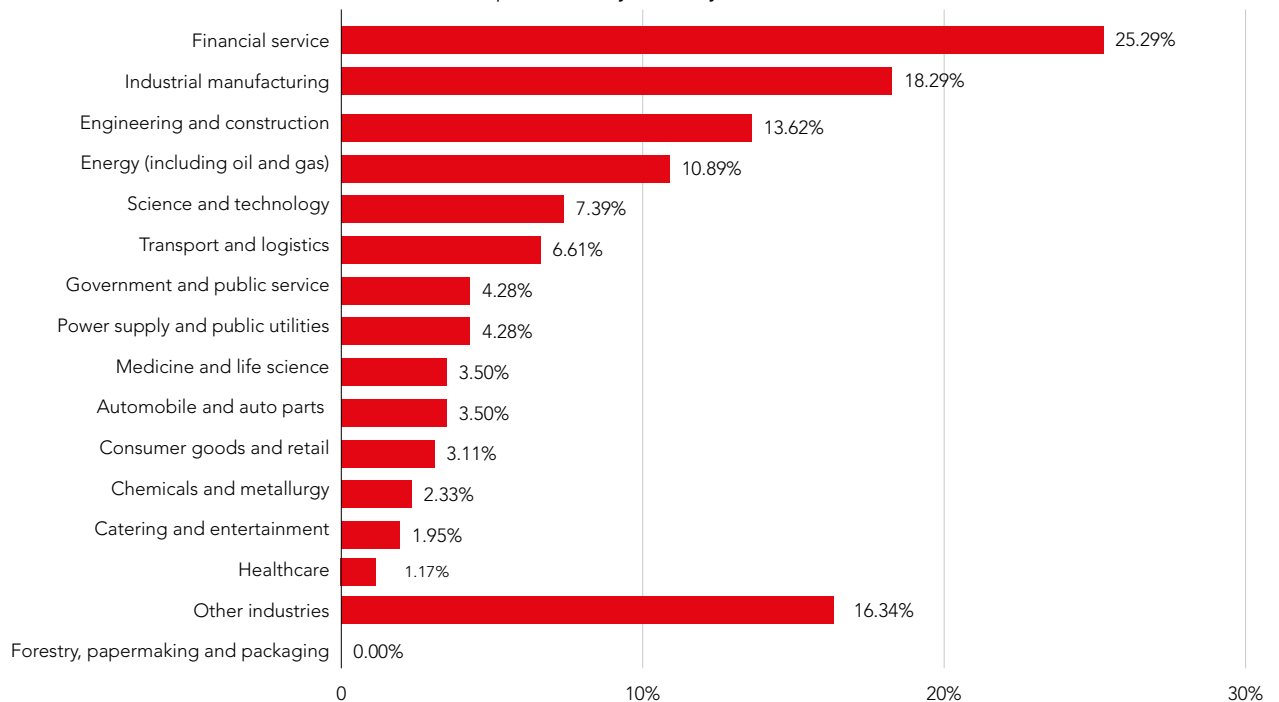


FIGURE 4: Respondents by industry

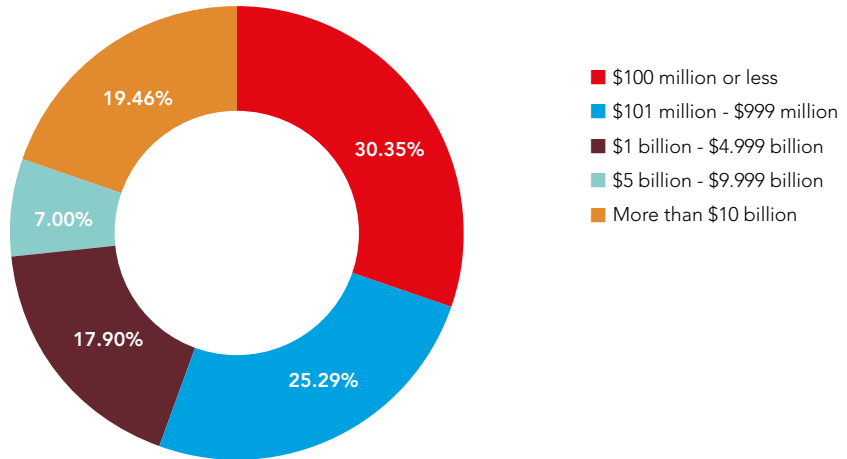


3. Respondents by scale

(1) Annual revenue

Over half (55%) of respondents have revenue of less than \$1bn a year, while almost 20% have annual revenue in excess of \$10bn (Figure 5).

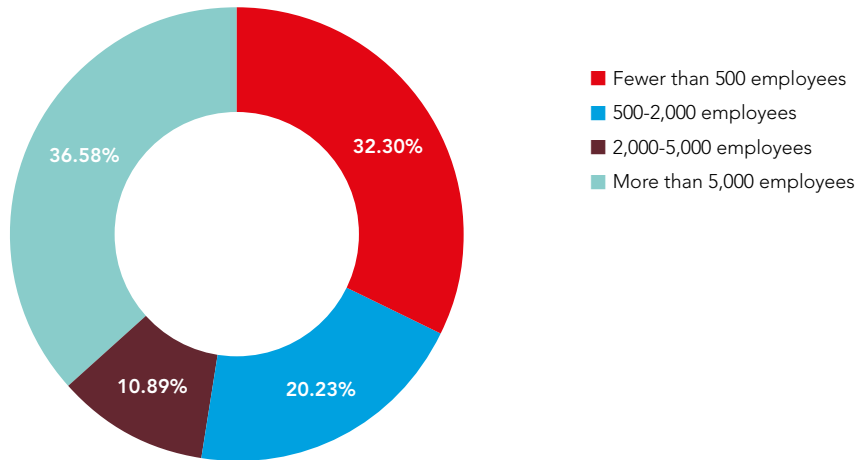
FIGURE 5: Respondents by annual revenue



(2) Number of employees

The employee number of the respondents also takes on a 'V' shape, with 36.58% having more than 5,000 employees and 32.30% having fewer than 500 employees (Figure 6).

FIGURE 6: Respondents by the number of employees

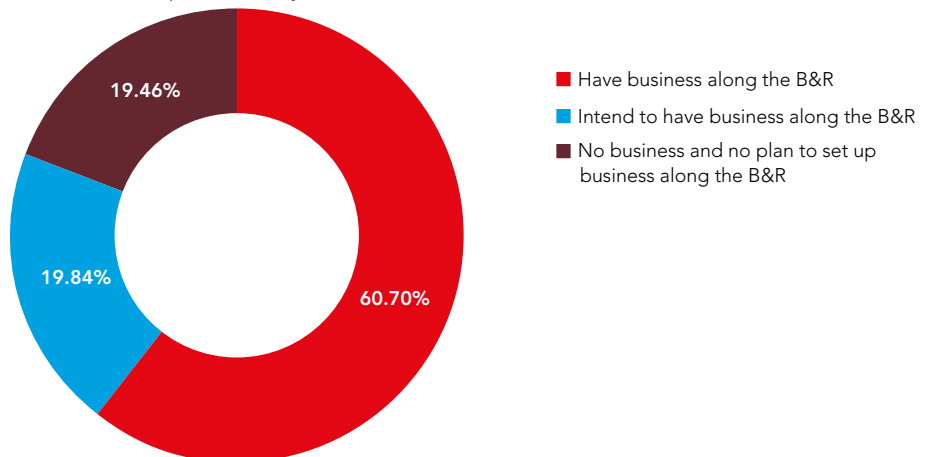


(III) COMPANIES SURVEYED FOR THIS RESEARCH

1. Current status

More than 60% of the company respondents are operating in the countries along the B&R routes, while another 20% intend to follow suit. This suggests that there is vast potential for economic cooperation along the B&R routes, and companies have clear intentions to start operations in these countries.

FIGURE 7: Respondents by business intentions



2. Number of branch offices along the B&R routes

Among the companies that already have operations along the B&R routes, more than 71% have opened no more than 10 branch offices; about 15% of them have established 11–50 branch offices; a few have more than 50 branch offices; and 7% have no branch office at all (Figure 8). Although many companies have started operations along the B&R routes, most are still in the early phase of their business expedition.

3. District allocation of branch offices

Among the companies that have operations along the B&R routes, more than 76% have established branches in South East Asia followed by Russia (about 38%). The number of companies with branches in Central Asia, South Asia, Middle East, and Central and Eastern Europe is almost aligned (accounting for 22%–28%), and Africa is branched by fewer than 19% of these companies. It indicates that South East Asia remains a key region for business along the B&R routes (Figure 9).

FIGURE 8: Respondents by the number of branch offices

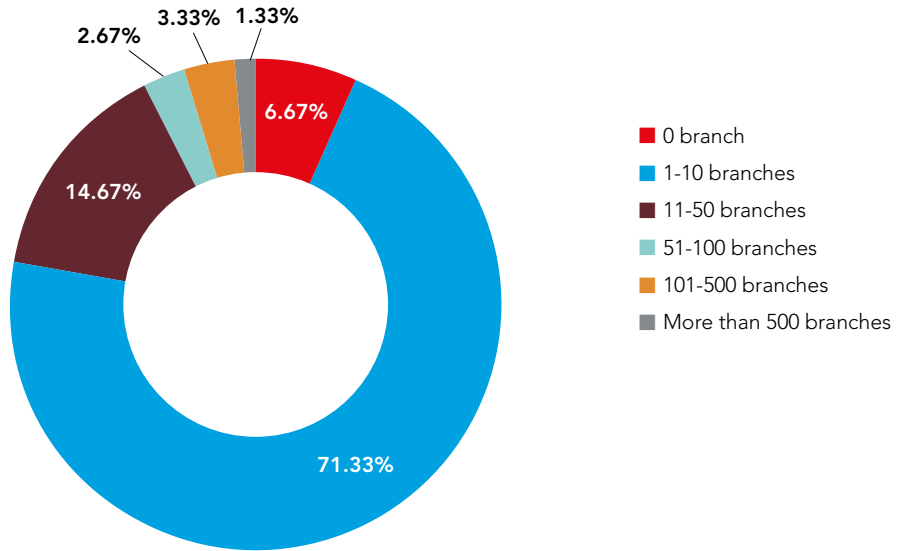
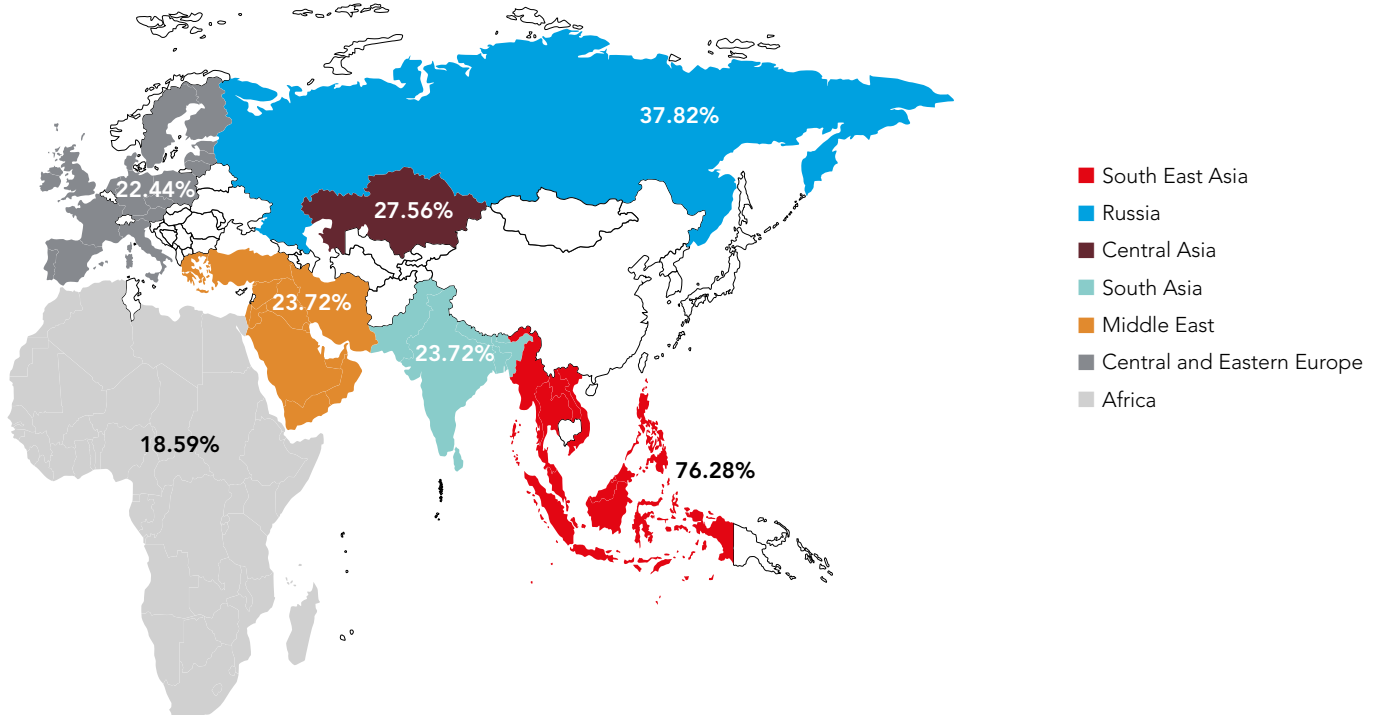


FIGURE 9: Respondents by the district of branch offices



4. Investment intentions

For the 156 enterprises with operations along the B&R routes, infrastructure construction tops the list of investment intentions, which accounts for 37%. The majority of the rest, investment in plant construction, overseas market expansion, industrial manufacturing, financial services and outbound mergers and acquisitions were each mentioned by between 16% and 22% of respondents. Professional services, e-commerce, bulk goods trade and warehouse logistics, however, account for around 10% each. 'Professional services' refers to accounting, auditing, tax and legal services. Other investment intentions regard education, health care, computer technology, energy, tourism and lodging, as well as government cooperation projects, accounting for around 10% each. This shows that infrastructure construction remains a key area of investment along the B&R routes (Figure 10).

5. Investment methods

Among those with operations along the B&R routes, nearly 70% have invested in these countries by 'setting up overseas branches', 36% by 'taking over overseas projects', 29% by 'acquiring overseas companies' and 10% by 'merging overseas business'. Also, 11% have established partnership with companies and organisations along the B&R routes by 'undertaking overseas operations', 'dispatching field staff' and 'engaging in international trade'. So we can see that 'setting up overseas branches' is the main method used by companies to invest along the B&R routes (Figure 11).

FIGURE 10: Respondents by investment intentions

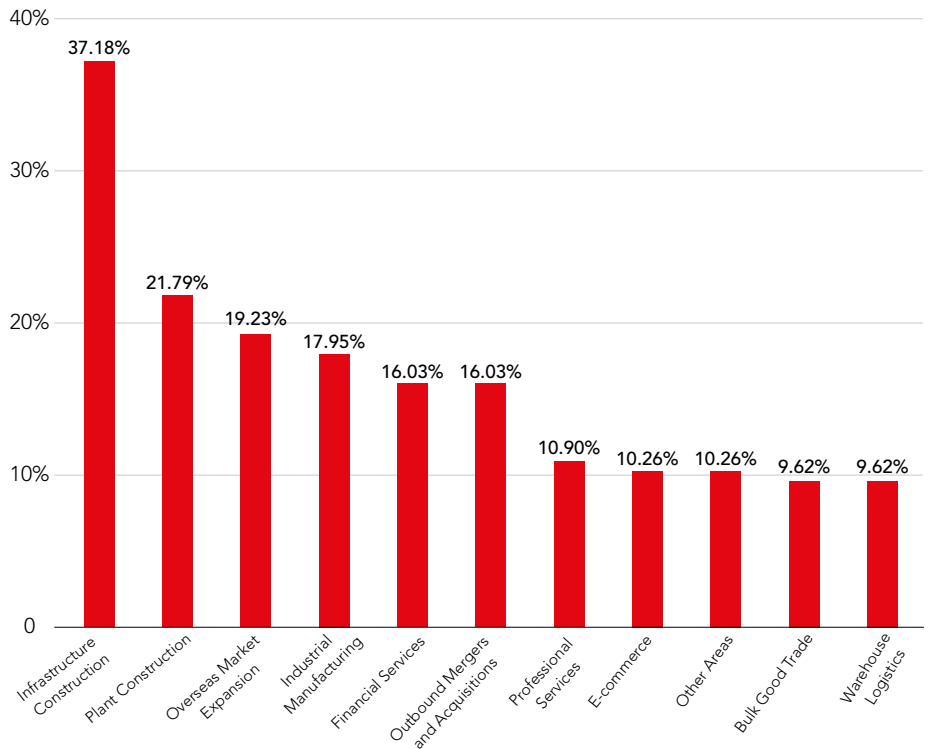
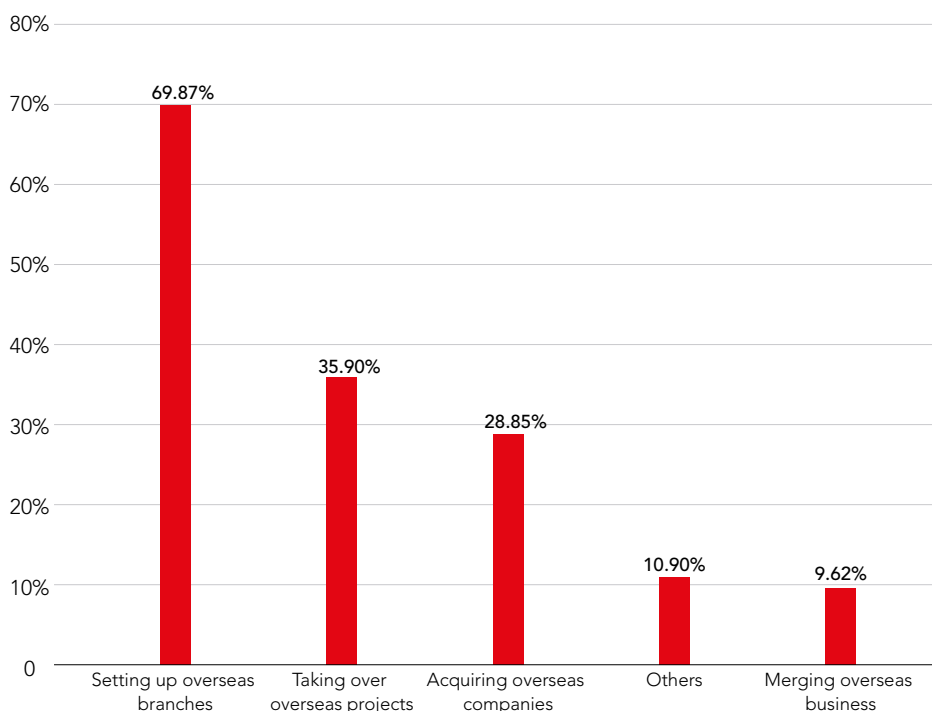


FIGURE 11: Respondents by investment methods





Accounting informatisation

This section will discuss the current situation of accounting informatisation of our respondents operating along the B&R routes, as well as challenges, demands and development of accounting informatisation.

By shedding light on these issues, we hope to help Chinese companies that are going global under the BRI to realise high-quality accounting informatisation, promote connectivity within and outside a company and facilitate the construction of a 21st-century Digital Silk Road.

For the purpose of this report, 'accounting informatisation' generally refers to the use of technologies in financial accounting, management accounting and management, including information systems, software platforms, and cloud services.

(I) THE STATUS OF ACCOUNTING INFORMATISATION

1. Application of overseas accounting informatisation modules

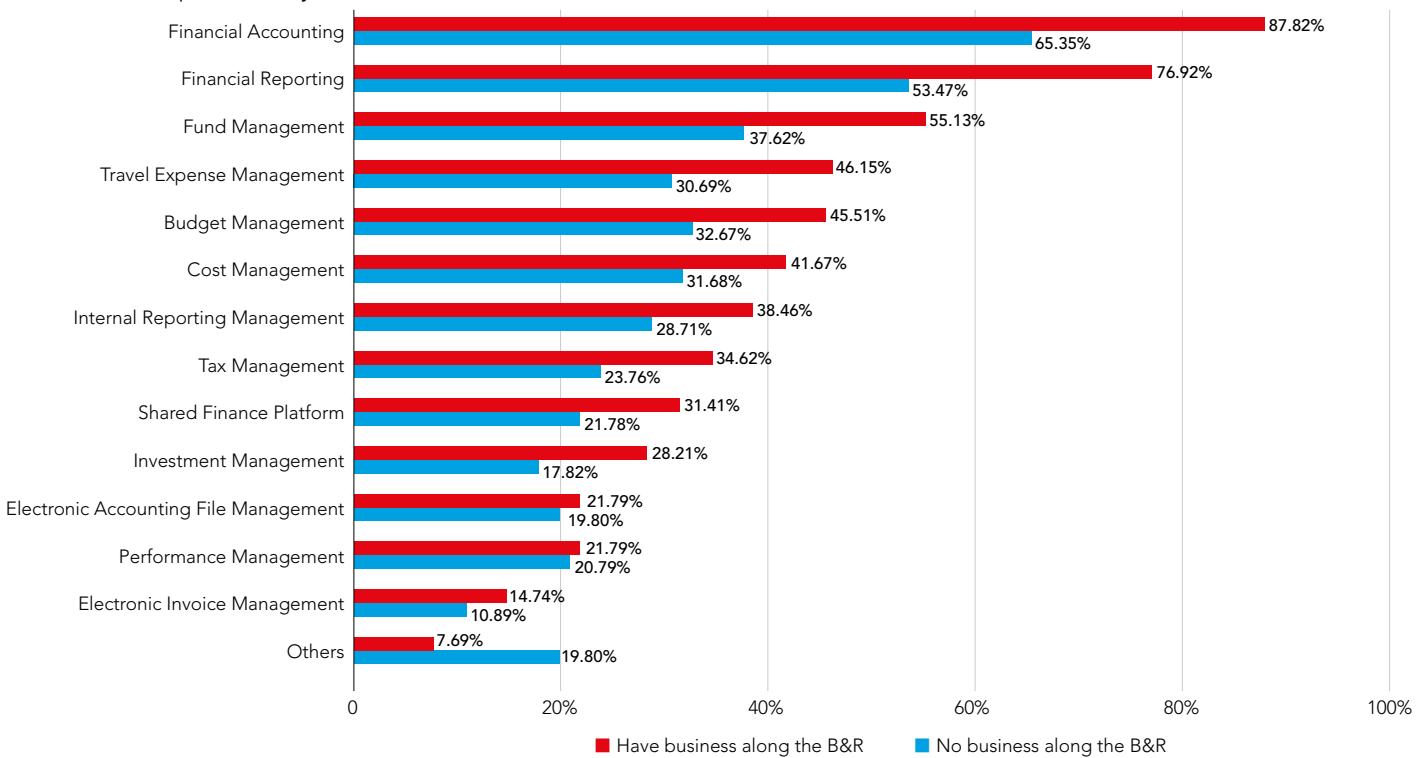
The financial accounting module and financial reporting module were used by 88% and 77% of respondents respectively (Figure 12). Meanwhile, modules of funds management, travel expense management, budget management, cost management and internal reporting management each mentioned by between 38% and 55% of respondents. The modules to speed accounting operation are less frequently used, including tax management, shared finance platform, investment management, electronic accounting file management, performance management and electronic invoice management. It indicates that enterprises going global are most concerned about

the maintenance of accounting and financial modules (including financial accounting and financial reporting), followed by accounting internal control and risk management modules (such as fund management, and travel expense management), as well as decision-making support modules (such as cost management) and the modules to improve accounting operation efficiency (such as the shared finance platform, investment management, electronic accounting file management).

For entities that applied accounting informatisation modules, the number of companies that have business along the B&R routes is 10% higher than that of companies with no business along the B&R routes.

Enterprises going global are most concerned about the maintenance of accounting and financial modules.

FIGURE 12: Respondents by demand

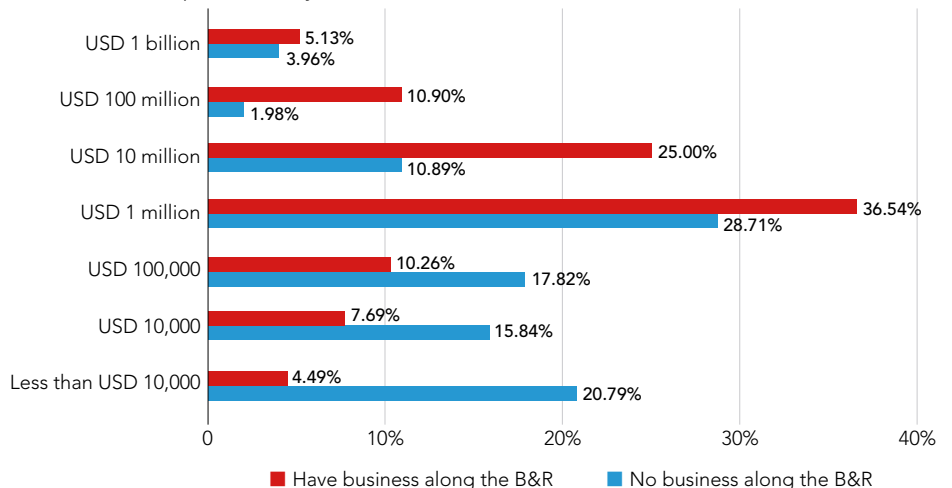


2. Investment scale of accounting informatisation

In terms of spending on investment the vast majority (78%) spent more than \$1m and 5% spent more than \$1bn (Figure 13).

For companies that have around \$1m to invest in accounting informatisation, the number of companies that already have operations along the B&R routes is 32% higher than that of companies with no operations along the B&R routes (Figure 13).

FIGURE 13: Respondents by investment scale



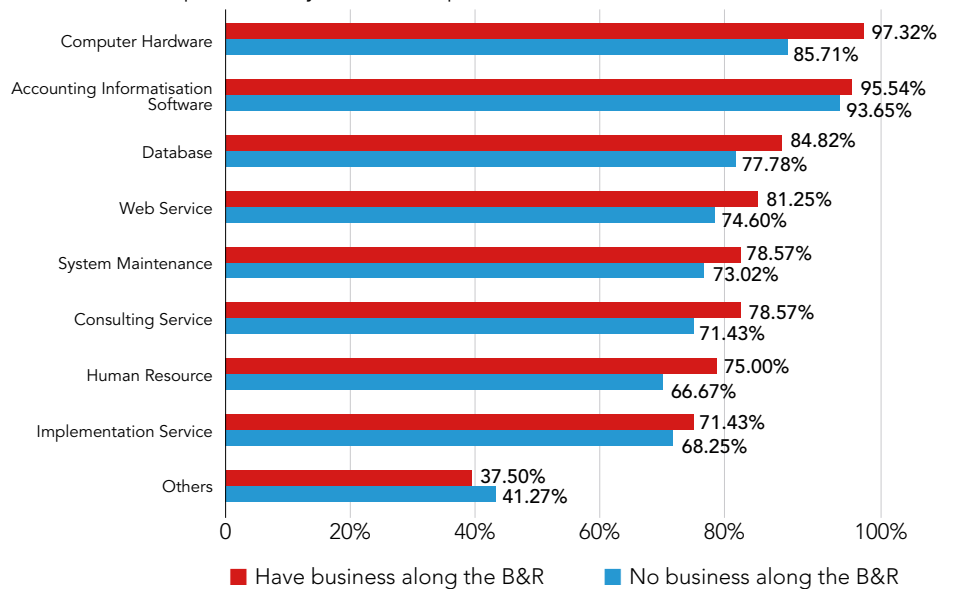
More than 95% of respondents with operations along the B&R routes have invested in computer hardware and accounting informatisation software.

3. Investment in accounting informatisation

(1) Investment preferences in accounting informatisation

Among the companies with operations along the B&R routes, more than 95% of them have invested in computer hardware and accounting informatisation software, over 81% in web services and database, and more than 71% in system maintenance, consulting services, human resources and implementation services.

FIGURE 14: Respondents by investment preferences

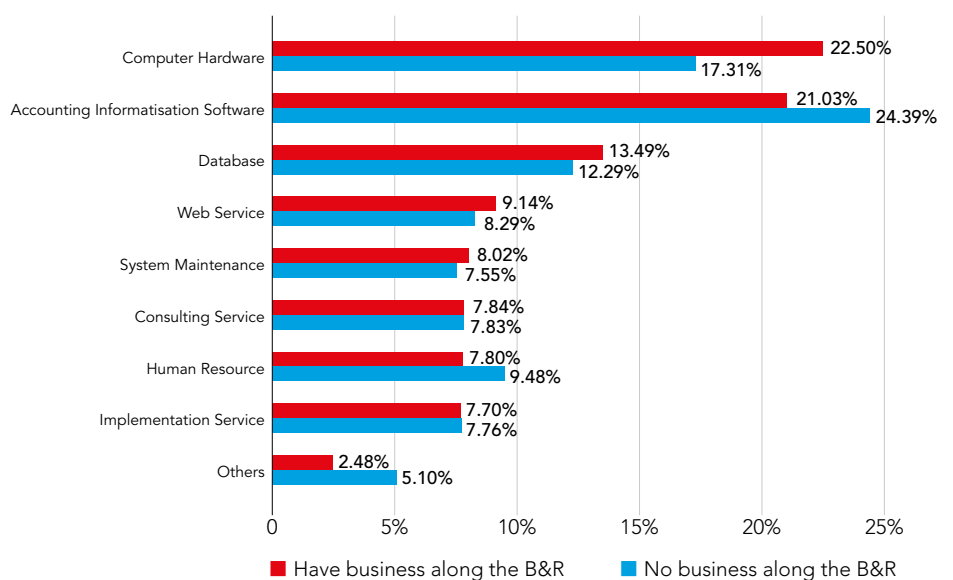


(2) Distribution of investment amount

The top three domains by investment amount are: computer hardware, accounting informatisation software, and databases, which collectively account for more than 57% of the total investment; the investment in web services, system maintenance, consulting services, human resources and implementation services is similar, each accounting for 7%–9%; in addition, 2% of the total investment is directed to other domains.

Compared with those having no operations along the B&R routes, an average 2.4% more of the companies with operations along the B&R routes have made a slightly larger amount of investment in computer hardware, database and consulting services.

FIGURE 15: Respondents by investment amount



The companies with operations along the B&R routes perform better in accounting informatisation and connectivity.

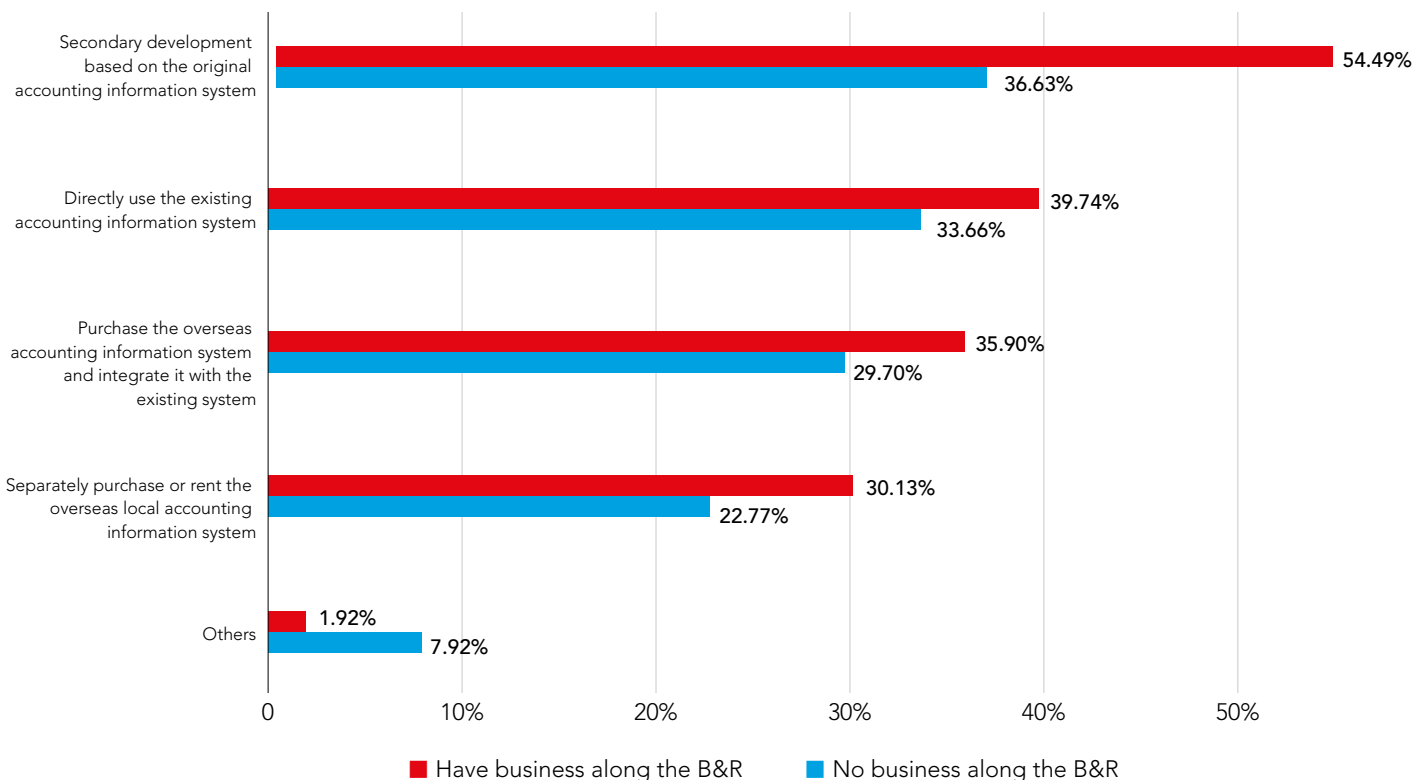
4. Methods of implementing accounting informatisation

Over half of the 156 companies informatise and apply their accounting system through 'secondary development based on the original accounting information system of the company'. About 40% of the respondents 'directly use their existing accounting information systems', and about 66% use the local accounting

information systems. Another 2% have not included the overseas operations in their company's accounting informatisation system (Figure 16). This shows that 'secondary development based on the original accounting information system of the company' is the main approach for a business to implement accounting informatisation when carrying out BRI-related business.

Compared with the companies having no operations along the B&R routes, 30% more of companies with operations along the B&R routes collectively performed much better accounting informatisation and connectivity (i.e. adopting standardised or integrated accounting information systems).

FIGURE 16: Respondents by implementation methods



More than 96% of respondents with operations along the B&R routes believe that the core value of corporate informatisation is 'supporting regular business development'.

(II) VALUES AND CHALLENGES OF ACCOUNTING INFORMATISATION

1. Core value of corporate informatisation

(1) Core values of corporate informatisation (by the number of respondents)

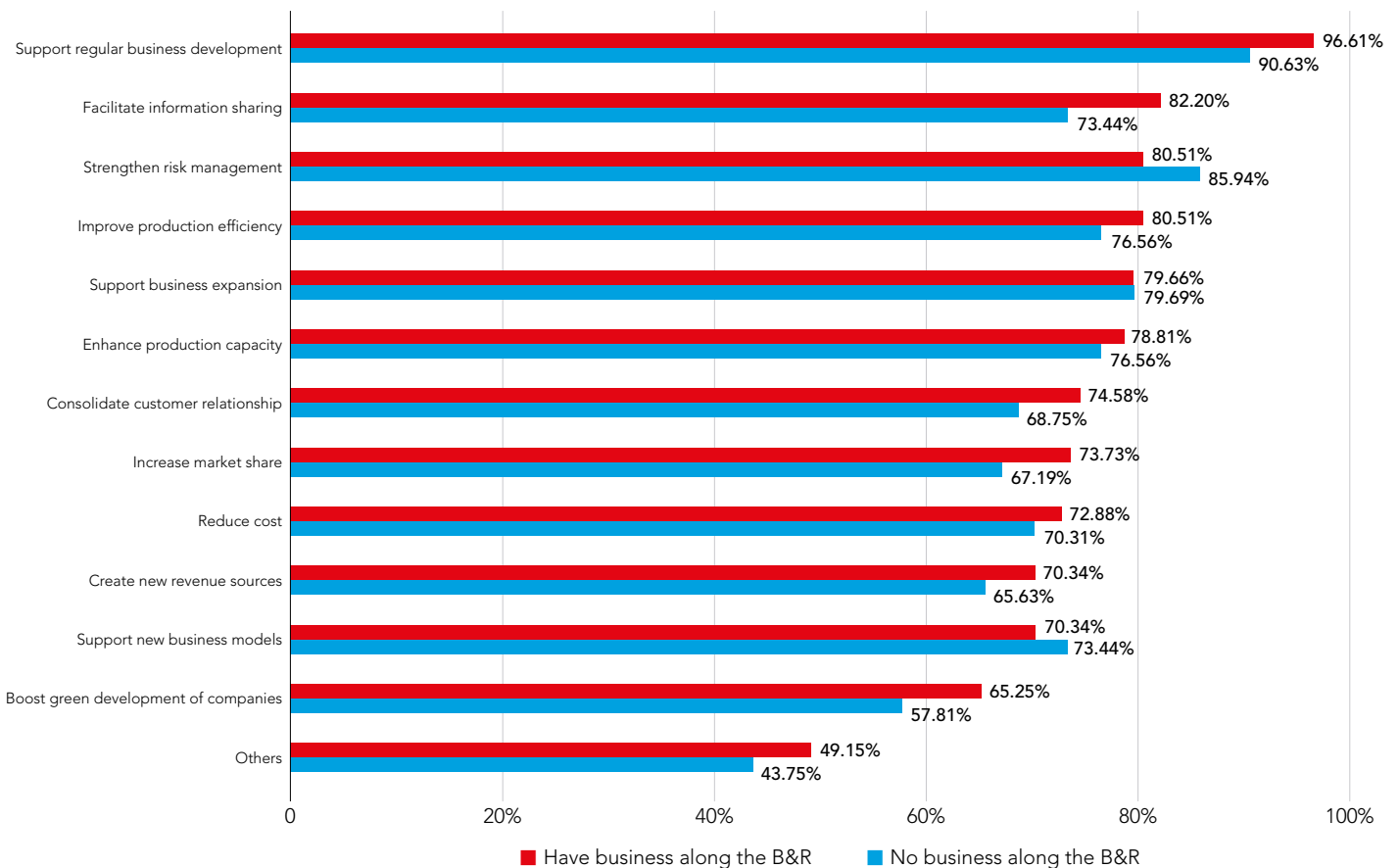
Among the companies with operations along the B&R routes, more than 96% believe that the core value of corporate

informatisation is 'supporting regular business development'. 80% of the companies believe corporate informatisation will facilitate information sharing, strengthen risk management, improve production efficiency, support business expansion and enhance production capacity, while 70% believe that corporate informatisation helps consolidate customer relationships,

increase market share, reduce cost, create new revenue sources, support new business models and boost the green development of companies (Figure 17).

Compared with the companies having no operations along the B&R routes, 3.5% more of the companies operating along the B&R routes believe that corporate informatisation has a higher value.

FIGURE 17: Core values of corporate informatisation (by the number of respondents)



‘Supporting regular business development’ is the core value of corporate informatisation.

(2) Core values of corporate informatisation (by contribution)

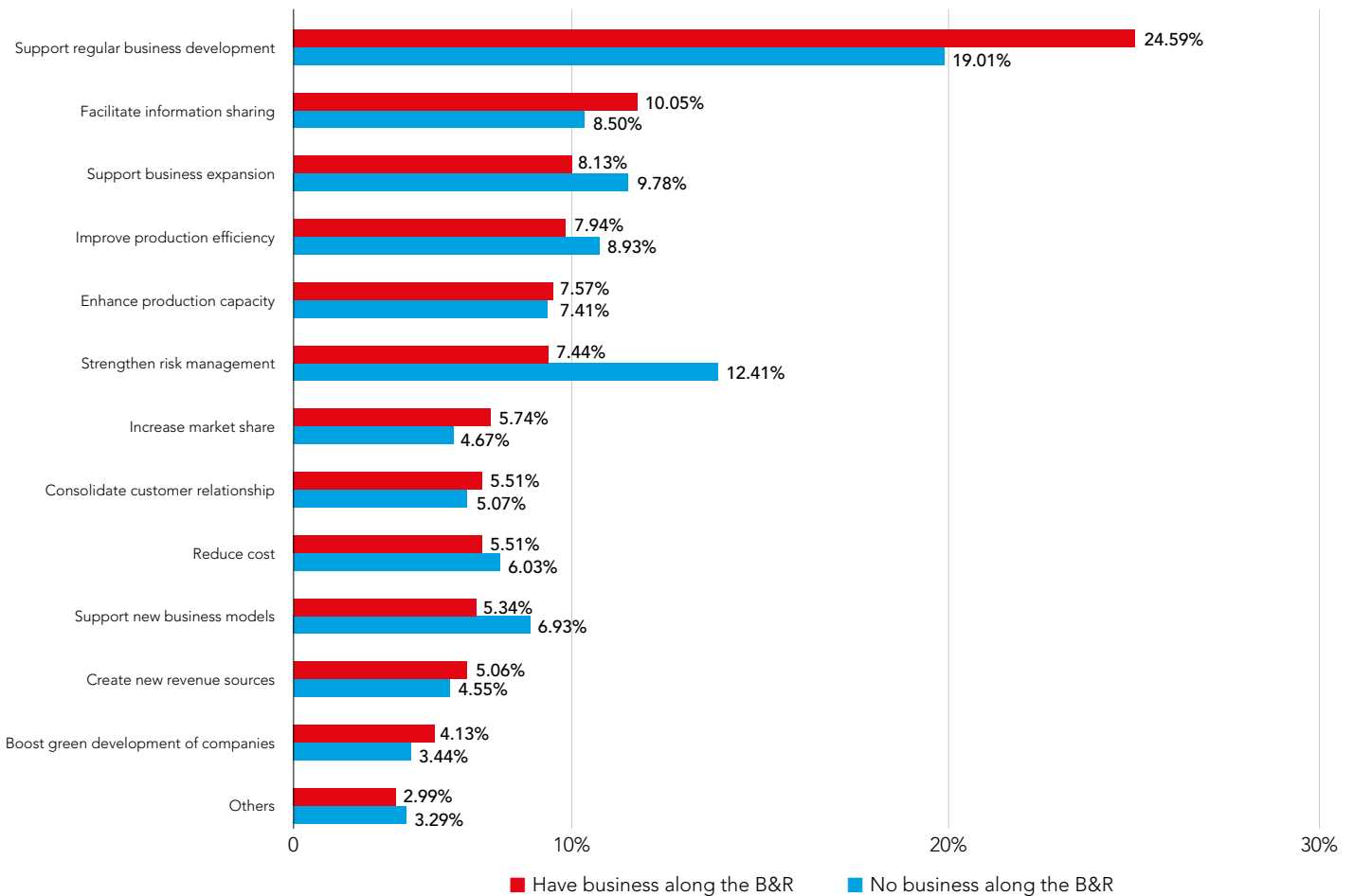
For the 156 companies with operations along the B&R routes, ‘supporting regular business development’ has become the core value of corporate informatisation (cited by about 25%), followed by ‘facilitating information sharing’ (cited by about 10%), and ‘supporting business

expansion, improving production efficiency, enhancing production capacity and strengthening risk management’ (cited by around 8% each (Figure 18)).

Compared with those having no operations along the B&R routes, 2.7% more of the companies with operations along the B&R routes believe that

corporate informatisation creates more value in three aspects, i.e. supporting regular business development, facilitating information sharing, and increasing market share. It shows that ‘supporting regular business development’ is the core value of corporate informatisation.

FIGURE 18: Core values of corporate informatisation (by contribution)



More than 96% of respondents with operations along the B&R routes believe that ‘supporting regular business development’ is the value of accounting informatisation.

2. Core values of accounting informatisation

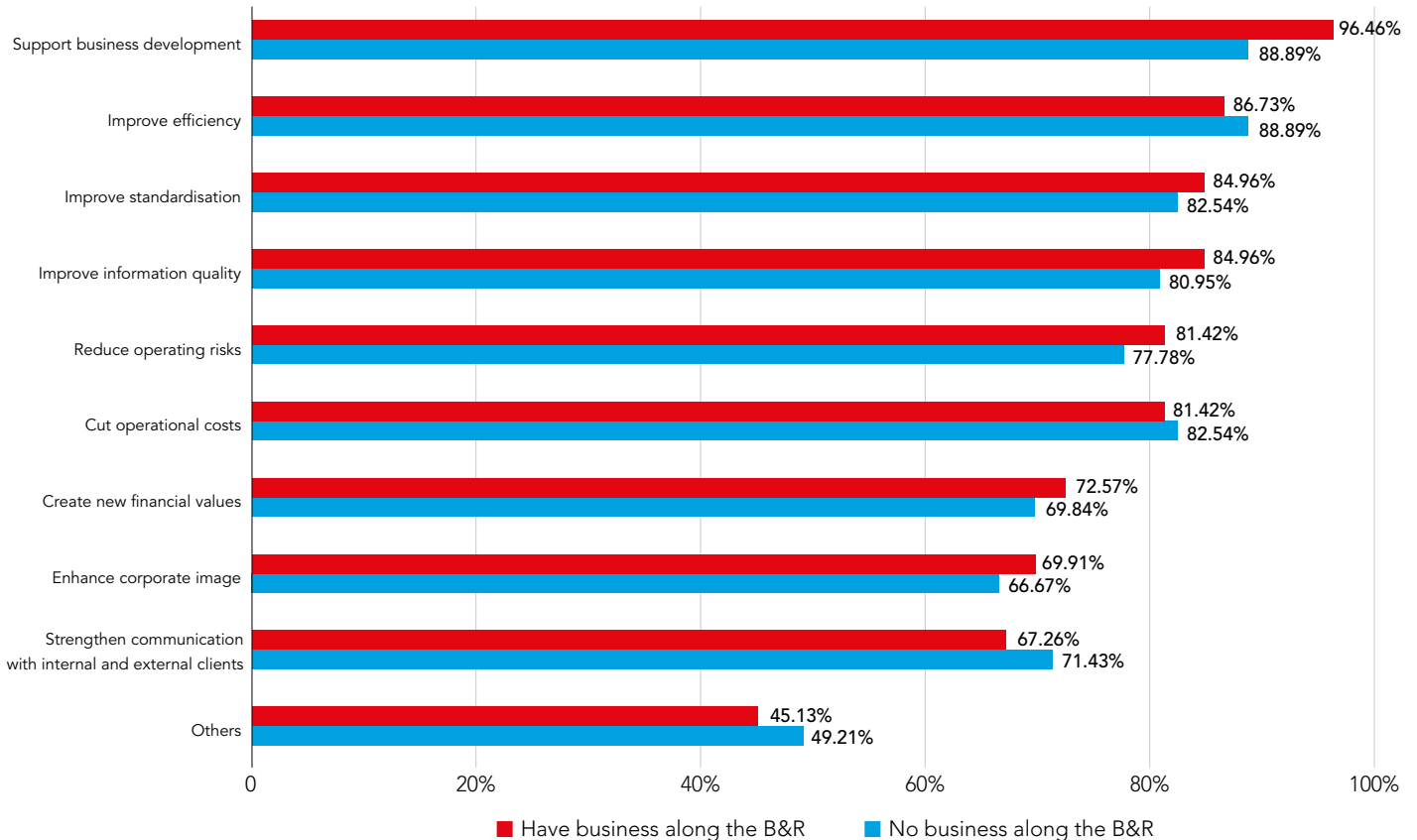
(1) Core values of accounting informatisation (by the number of respondents)

In the companies with operations along the B&R routes, more than 96% believe that the core value of accounting informatisation is ‘supporting regular business

development’. More than 81% believe that accounting informatisation will improve efficiency, improve standardisation, improve information quality, cut costs and reduce operating risks. About 70% believe that accounting information helps create new financial values, enhance corporate image and strengthen communication with internal and external clients (Figure 19).

Compared with those having no operations along the B&R routes, 3.5% more of companies with operations along the B&R routes believe that accounting informatisation will create greater values.

FIGURE 19: Core values of accounting informatisation (by the number of respondents)



For over 21% of respondents with operations along the B&R routes 'supporting business development' has become the core value of accounting informatisation and application.

(2) Core values of accounting informatisation (by contribution)

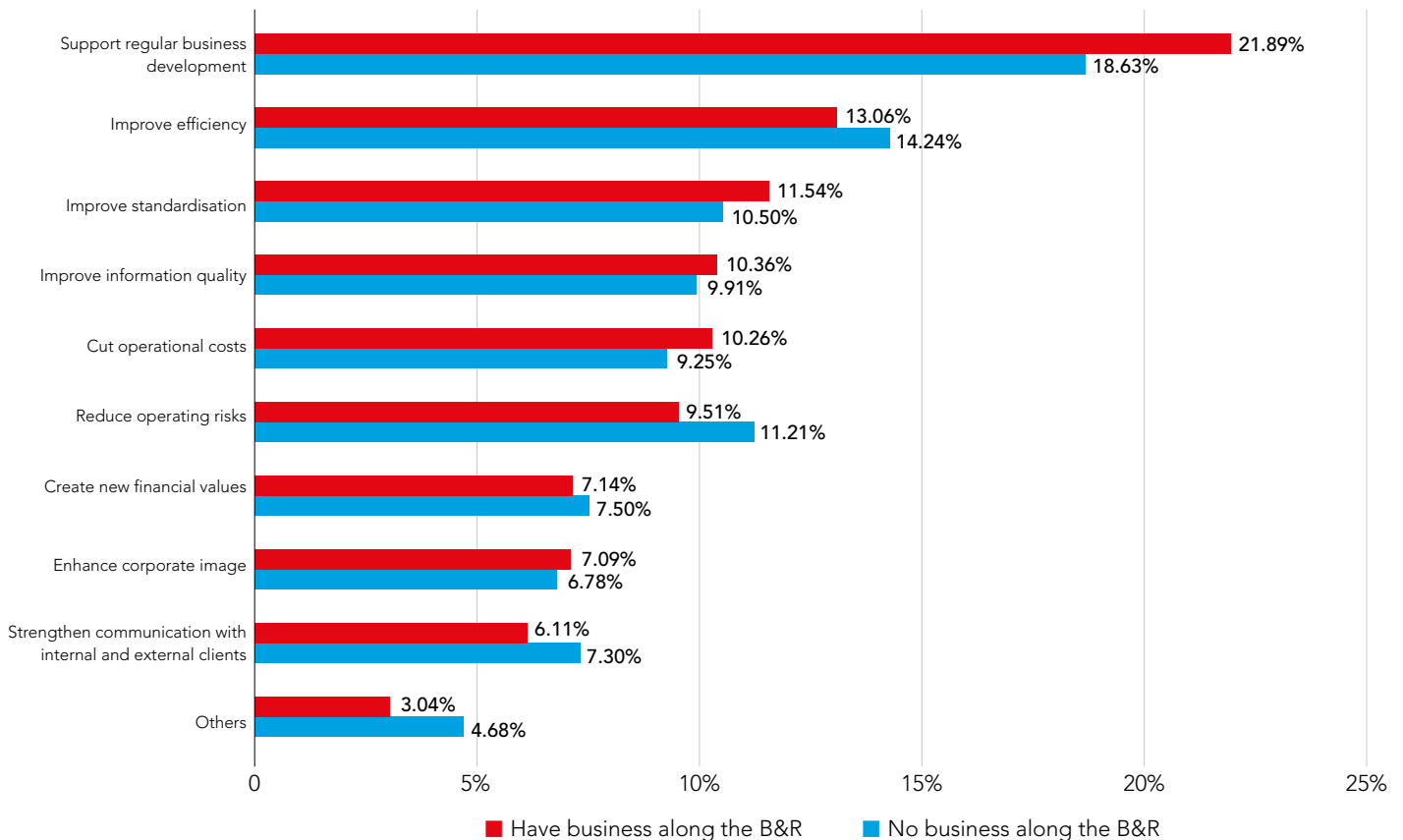
For the 156 companies with operations along the B&R routes, 'supporting business development' has become the core value of accounting informatisation and application (accounting for over 21%), followed by 'improving efficiency'

(accounting for 13%), and 'improving standardisation, improving information quality, cutting costs and reducing operating risks' (accounting for around 10% respectively) (Figure 20).

Compared with those having no operations along the B&R routes,

1.8% more of the companies with operations along the B&R routes believe that accounting informatisation creates more value in three aspects, i.e. supporting business development, improving standardisation and cutting operational costs.

FIGURE 20: Core values of accounting informatisation (by contribution)



The biggest barrier for a business in promoting accounting informatisation is that its current accounting information systems does not support international business.

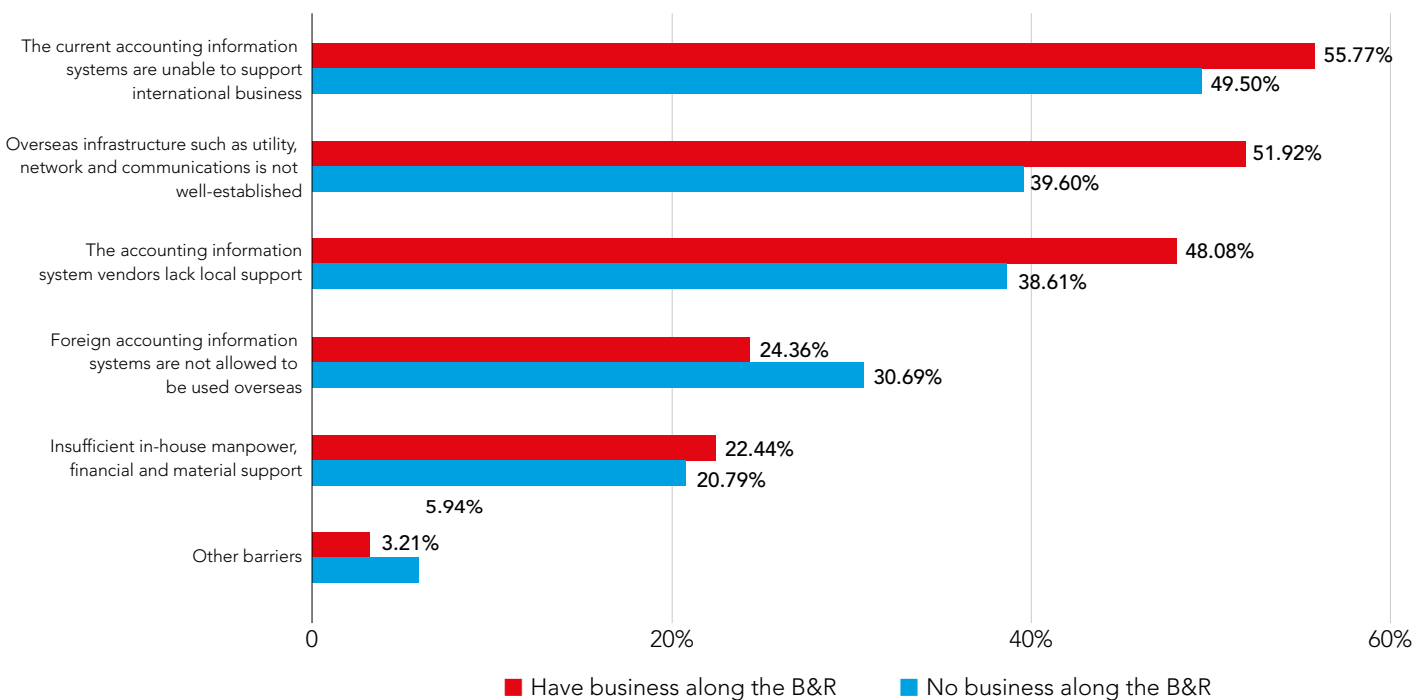
3. Barriers against accounting informatisation

Among the companies with operations along the B&R routes, almost half of them think that the major barriers for them to promote accounting informatisation and application are that: 'the current accounting information system is unable to support international business', 'overseas infrastructure such as utility, network and communications is not

well-established', and that 'software vendors lack overseas support for their accounting information systems'. Other barriers include 'local authorities now allowing the use of foreign accounting information systems' and 'insufficient in-house manpower and financial and material support', according to more than 22% of these companies. In addition, about 3% of them believe there are some other barriers, such as 'unable to satisfy the special regional demand' (Figure 21).

Compared with those having no operations along the B&R routes, 9% more of the companies with operations along the B&R routes believe that the top three barriers are: 'their accounting information software vendors lack of local support', 'overseas infrastructure such as utility, network and communications not well-established', and 'the current accounting information systems [are] unable to support international business'.

FIGURE 21: Barriers against accounting informatisation



Data security is the primary concern in accounting informatisation.

4. Negative effects of accounting informatisation

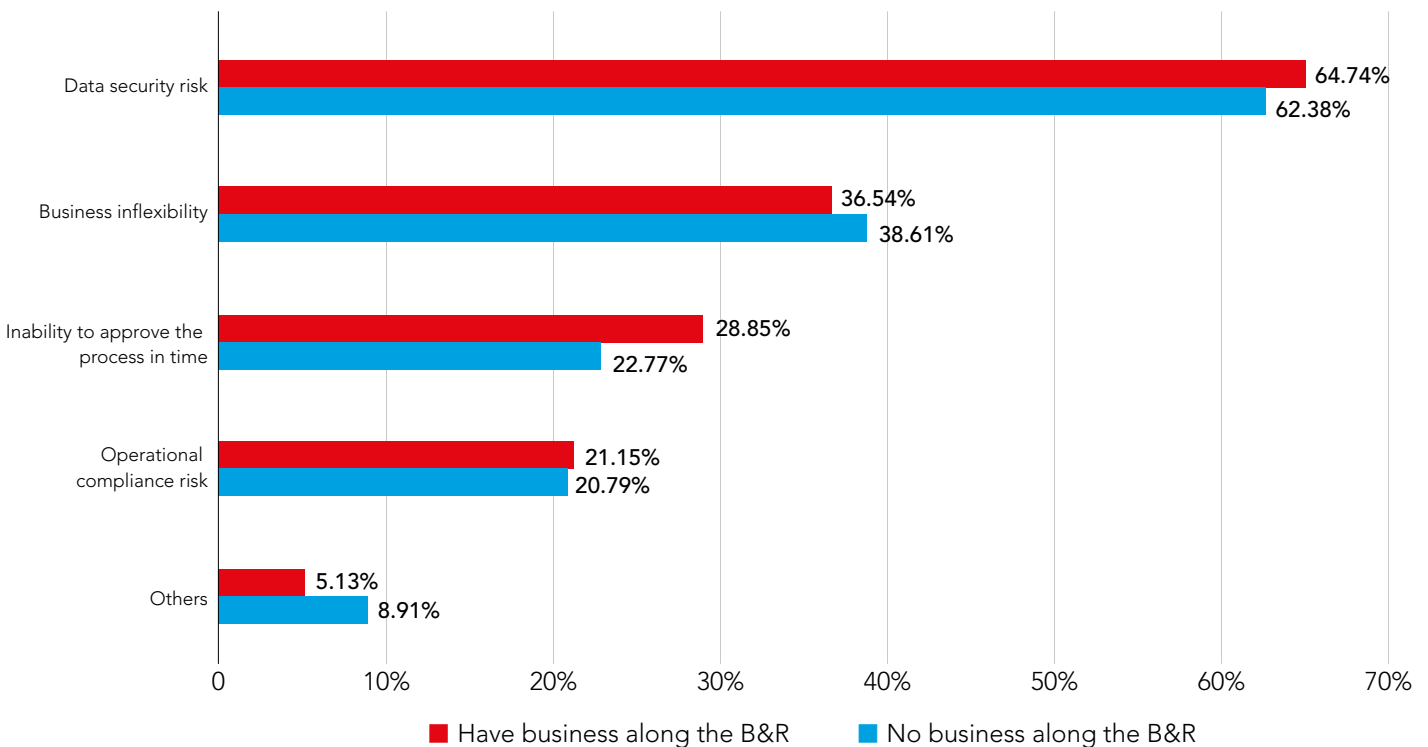
As for the negative effects of accounting informatisation, of the 156 companies, 65% selected 'data security risk', followed by 'business inflexibility' (more than 36%), 'inability to approve the process in time' (about 29%), 'operational compliance risk'

(more than 21%), and other effects, such as information silos, policy risk and tax risk (5%). The primary risk incurred by accounting informatisation lies in the data security (Figure 22).

Compared with those having no operations along the B&R routes, an

average 6% more of the companies with operations along the B&R routes believe the 'inability to approve the process in time' will generate a greater negative effect. Therefore, the issue of timely approval deserves special attention of the enterprises going global.

FIGURE 22: Negative effects of accounting informatisation



For the companies with operations along the B&R routes, ‘supporting accounting compliance in the overseas countries’ and ‘supporting multiple accounting standards’ are the most urgently needed functions.

(III) DEMANDS FOR ACCOUNTING INFORMATISATION

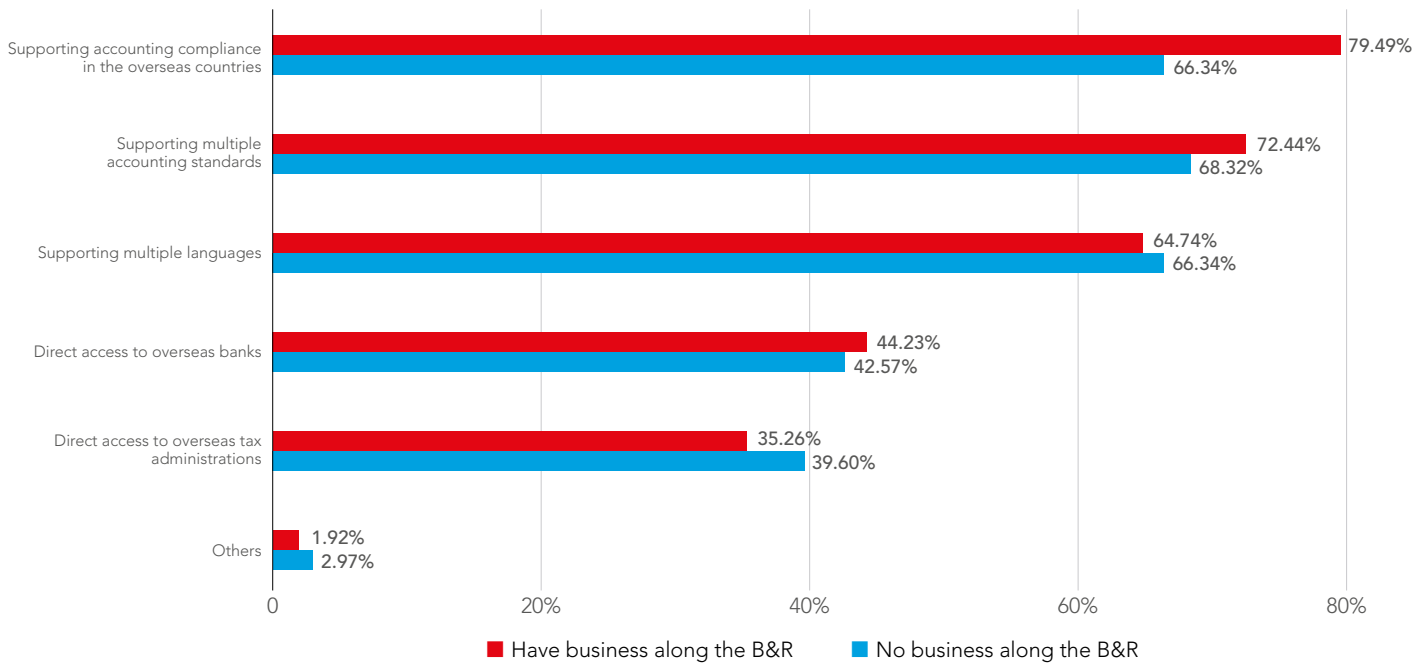
1. Demands for the functions of the accounting information systems

80% of the companies with operations along the B&R routes urgently need the function of ‘supporting accounting compliance in the overseas countries’,

followed by ‘supporting multiple accounting standards’ (over 72%), ‘supporting multiple languages’ (about 65%), and ‘direct access to overseas tax administrations’ and ‘direct access to overseas banks’ (about 40%). Some enterprises also need such functions as ‘system efficiency’ and ‘flexible and diversified report centres’ (Figure 23).

Compared with those having no operations along the B&R routes, 13% more of the companies with operations along the B&R routes are in greater need of ‘supporting accounting compliance in the overseas countries’; 4% more need ‘supporting multiple accounting standards’.

FIGURE 23: Respondents by demands



The data suggests that the multiple language supporting need for user interface is more urgent than that for content processing.

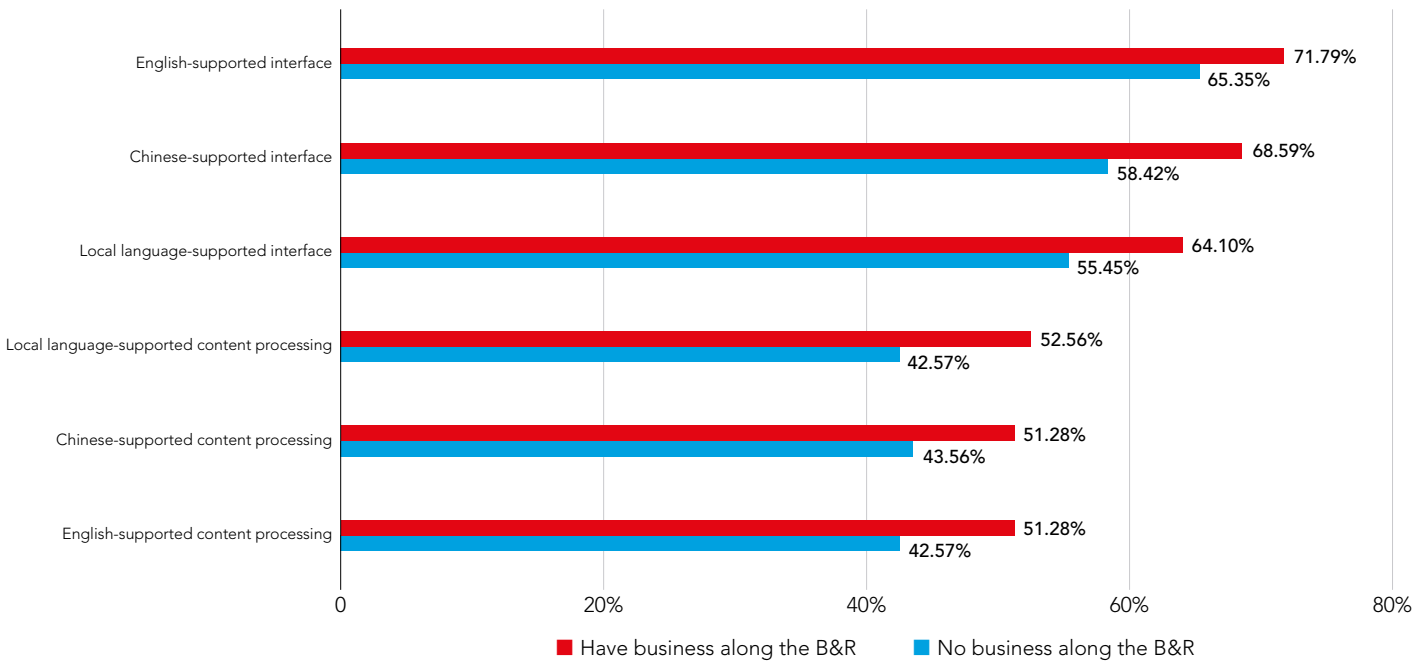
2. Language needs for the accounting information systems

For the companies with operations along the B&R routes, the top three language needs of user interface are English, Chinese, and local language (accounting for over 68% on average), followed by

content processing need for multiple languages (each accounting for over 51%). It suggests that the multiple language supporting need for user interface is more urgent than that for content processing (Figure 24).

Compared with those having no operations along the B&R routes, an average 8.5% more of the companies with operations along the B&R routes are in greater need of language support for their accounting information systems.

FIGURE 24: Respondents by language needs



80% of the companies with operations along the B&R routes regard the 'network speed' as an impact factor of the accounting information system performance.

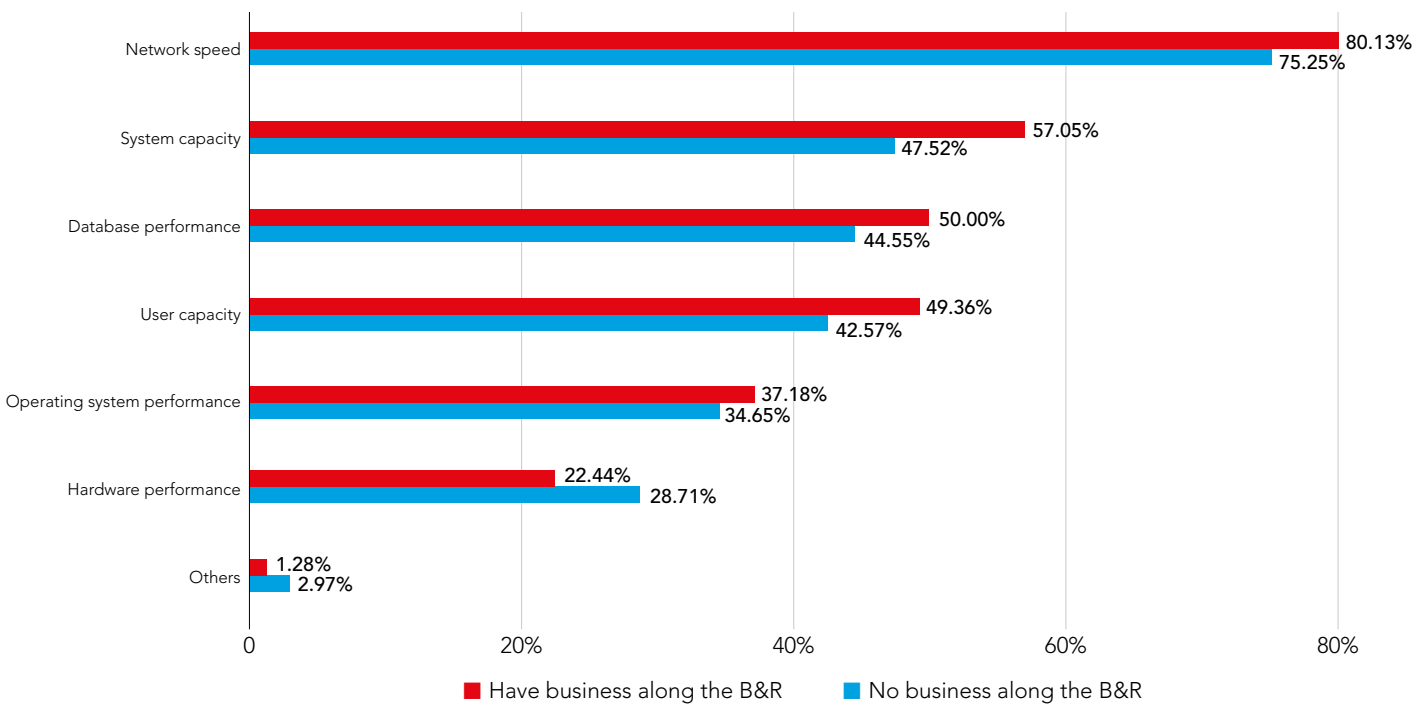
3. Impact factors of the accounting information system performance

80% of the companies with operations along the B&R routes regard the 'network speed' as a factor having an impact on the accounting information system performance. Other impact factors are the 'system capacity' (57%), 'user capacity of the accounting information system' and 'database performance' (50%),

'operating system performance' (37%), and 'hardware performance' (over 22%). This indicates that the network infrastructure construction in the 'B&R' countries needs to be strengthened, and the accounting information system performance and database as well as the system user capacity should also be improved in the countries along the B&R routes (Figure 25).

Compared with those having no operations along the B&R routes, 3% more of the companies with operations along the B&R routes believe the said factors will affect the accounting information system performance to a greater extent.

FIGURE 25: Factors having an impact on the accounting information system performance



Big data and cloud computing are the new technologies attracting the most attention from the companies operating along the B&R routes.

(IV) THE DEVELOPMENT OF ACCOUNTING INFORMATISATION

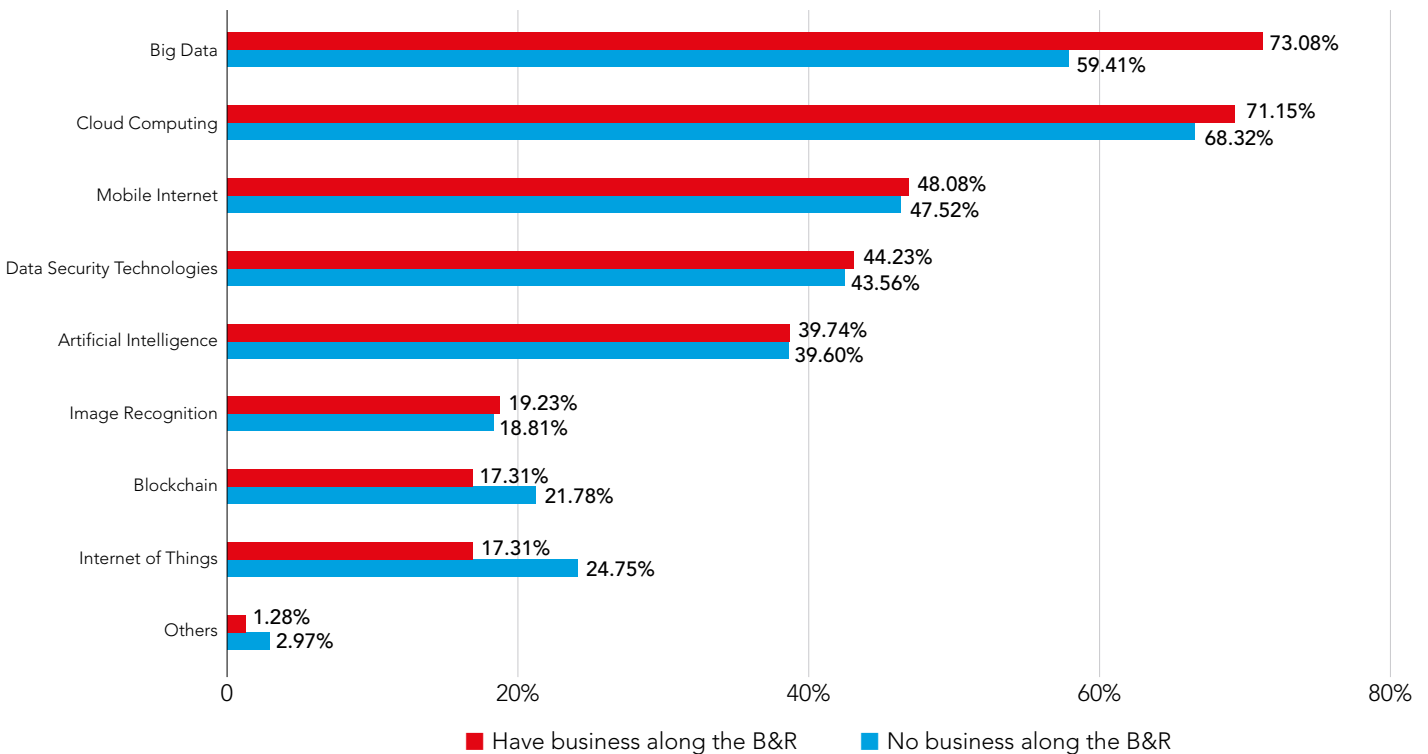
1. Technological expectations of accounting informatisation

As for the expected new technologies in accounting informatisation, over 71% of the companies with operations along the B&R routes hope to use 'big data' and 'cloud computing', followed by 'mobile internet' (about 48%), 'data security

technologies' and 'artificial intelligence' (40%), and 'image recognition', 'blockchain' and 'Internet of Things' (about 20%). It suggests that big data and cloud computing are the new technologies attracting the most attention from the companies with operations along the B&R routes, followed by mobile internet, data security technologies and AI (Figure 26).

Compared with those having no operations along the B&R routes, 13.5% more of the companies with operations along the B&R routes have a higher expectation of using 'big data', a slight 1% higher expectation of using cloud computing, mobile internet, data security technologies, AI and image recognition, and a 4.5% lower expectation of using blockchain and the IoT.

FIGURE 26: Respondents by expectations in accounting informatisation



The influence of new technologies on the professional accountants will be constantly expanded along with its application.

2. Connectivity in accounting informatisation

As regards connectivity in accounting informatisation, 136 companies with operations along the B&R routes have shared their opinion. More than 55% believe that connectivity and consolidation across the accounting systems should be a priority, including connectivity and consolidation within the financial accounting information system (eg unified financial accounting, unified financial reporting, connectivity between accounting and reporting, and financial shared service), connectivity within the management accounting information system (eg unified budget management and unified financial analysis), within the financial management information system (eg centralized fund management, payment and reimbursement, and project investment management), and connectivity across the above three systems (eg fund management and budget management, budget management and business management).

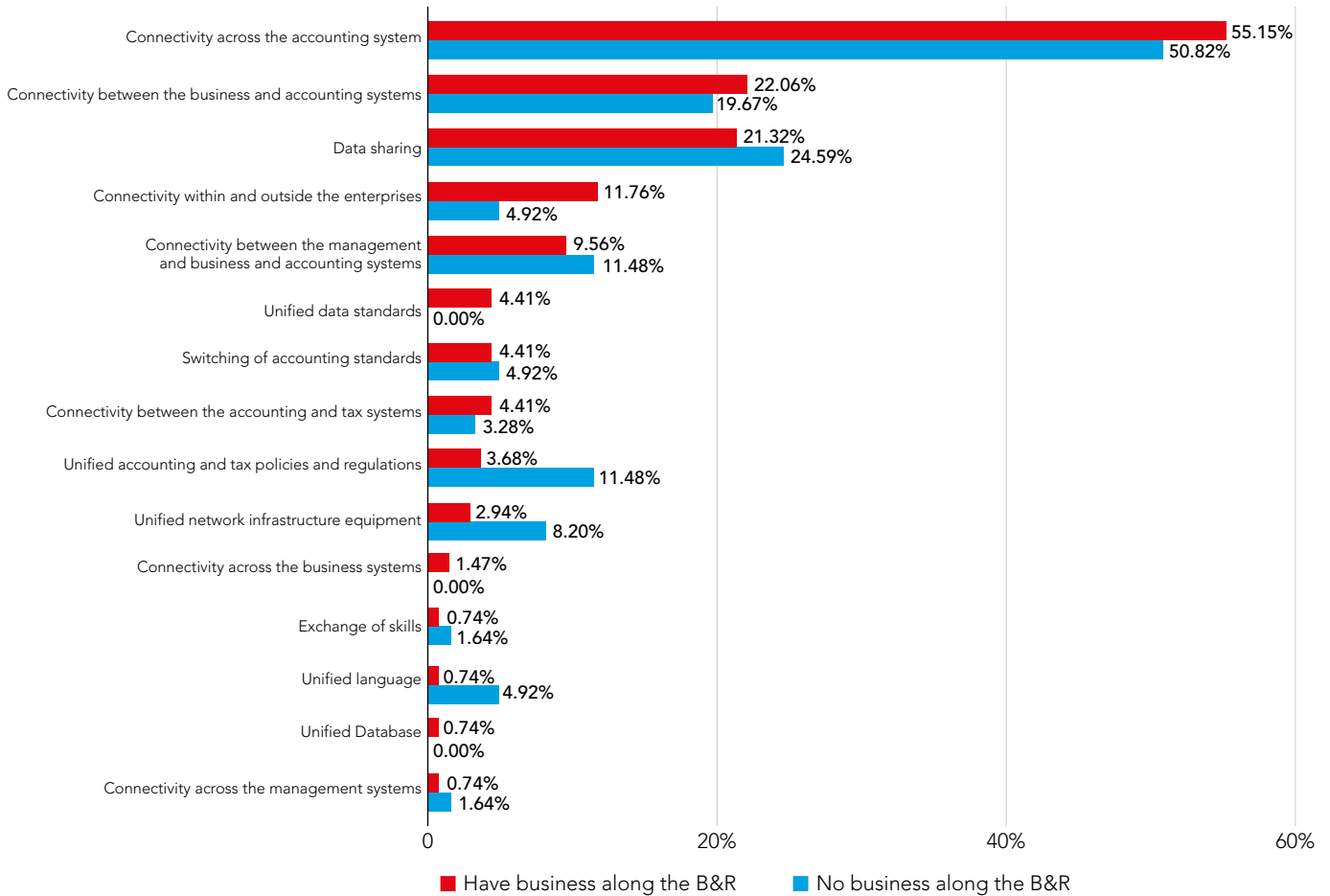
More than 21% of the enterprises believe that connectivity between the business and accounting systems (eg product lifecycle management, advanced planning and schedule management) and data sharing (including financial data sharing, management accounting information sharing, business data sharing and external information sharing) are the top priorities. About 10% say that their priority should be connectivity between the internal management system and the business and accounting systems (including business accounting and risk management, OA and business, business processing procedure, group management and control, real-time communication), as well as between the enterprises and external stakeholders (including direct connection between banks and enterprises, interconnection of supply chains, direct connection between tax administration and enterprises, and direct connection between foreign exchange administration and enterprises).

Around 4% of the enterprises give priority to the importance of unified data standards, unified accounting and taxation policies and regulations, connectivity between the accounting and taxation systems (including bills and taxation) and switching of accounting standards. Some companies also mentioned the connectivity across the business systems, exchange of skills, unified language, unified database, and connectivity across the management systems.

Compared with the companies having no operations along the B&R routes (61 companies have shared their opinions), those with operations along the B&R routes have slightly more (or 3% higher than the former on average) demand for connectivity in terms of the connectivity and consolidation across the accounting systems, connectivity between the business and accounting systems, connectivity within and without the enterprises, unified data standards, connectivity between the accounting and tax systems, connectivity across the business systems. The survey shows that the top priority of accounting informatisation should be 'connectivity across the accounting systems', followed by 'connectivity between the businesses and accounting systems' and 'data sharing'.

The top priorities of accounting informatisation should be 'connectivity across the accounting systems', 'connectivity between the businesses and accounting systems' and 'data sharing'.

FIGURE 27: Respondents by the needs for connectivity





Digital competencies and training of accounting talents

Technological support is essential for the BRI. In order to better apply these technologies, the finance department of enterprises should master the new skills whether through retraining to improve the skill level of current employees, through the adoption of new skills to re-equip the profession, or through external recruitment to acquire new skilled talents.

In the report *Professional Accountants – the Future*, ACCA has analysed the combination of professional competencies geared to the future. Seven key skill domains (or ‘professional quotients (PQ)’) are indispensable for the sustained development of the accounting profession. Out of the seven professional quotients, technical skills and ethics (TEQ) is the core. The rest of the six quotients include: emotional intelligence (EQ) and intelligence (IQ) which are familiar to all, as well as digital awareness (DQ), creativity (CQ), vision (VQ) and experience (XQ), which are given special attention in the report. These ‘professional quotients’, which are related and crucial to the future financial function, will help professional accountants and enterprises identify the skill combination they need. As the finance leaders, they play a core role in enterprise development. Therefore, they should seize the opportunities to learn

about the functions and use of all available tools. However, it is by no means easy to fulfil this duty.

Talents constitute the most important consideration for the digital connectivity in the Belt and Road. We may have a large variety of information systems, emerging technologies and information, but the key lies in whether we will have the appropriate talents to harness them. The application of technologies requires a re-evaluation of the skill combination across the entire finance department, which is why the investment in people should be made. We need to realise that data analysts, robot control specialists, big data analysts, information system process optimisation experts and other talents with valuable digital competencies are making an impact in the market. In many markets, they have even become extremely scarce. On the one hand, it is necessary to recruit talents for the enterprises as early as possible; on the other, the enterprises also need to arrange in advance to help their current employees re-do their career planning and get ready for the new roles with digital competencies.

Finance leaders should also lend an ear to the opinions of young employees, subject experts, and senior staff who actively embrace the emerging technologies, because they would otherwise find it difficult to learn about all technological changes and identify opportunities and risks in time. Targeted at the generation

born in the 1980s, ACCA’s global survey ‘Generation Next’ finds that as they have grown up with the innovation and evolution of digital technologies, young employees are often more likely to be experts in certain areas. So what enterprises need to do is to consider how to turn them into senior staff.

It is essential to bridge the skill gap created by the emerging technologies. However, it is a long-term mission with no ‘once-for-all’ solution. Based on the data obtained through the study, there is still a long way to go in cultivating digital competencies and accounting talents.

(I) RESPONDENTS’ UNDERSTANDING OF TECHNICAL DOMAINS

Technological development is a sustained process. Many people have drawn an analogy between the development of AI, big data and blockchain and the rise of internet. Indeed, the development of the internet is similar to that of the other three. In the 1990s, lots of companies established their own corporate websites, but few truly understood the value of the internet. Those that did see its value gradually grew to be the industry giants and dominate the market in the 5–10 years that followed. Therefore, this study has paid special attention to the respondents’ understanding of the technical domain. In general, it shows that the respondents have a general understanding of the technical domain. On a scale of 1 (do not know at all) to 5

The respondents of companies already engaged in BRI businesses know more about information technologies than companies that have not yet engaged.

(proficiency in use), the average score of all the respondents is 3.00, which means they have only a general understanding of the technical domain (Figure 28).

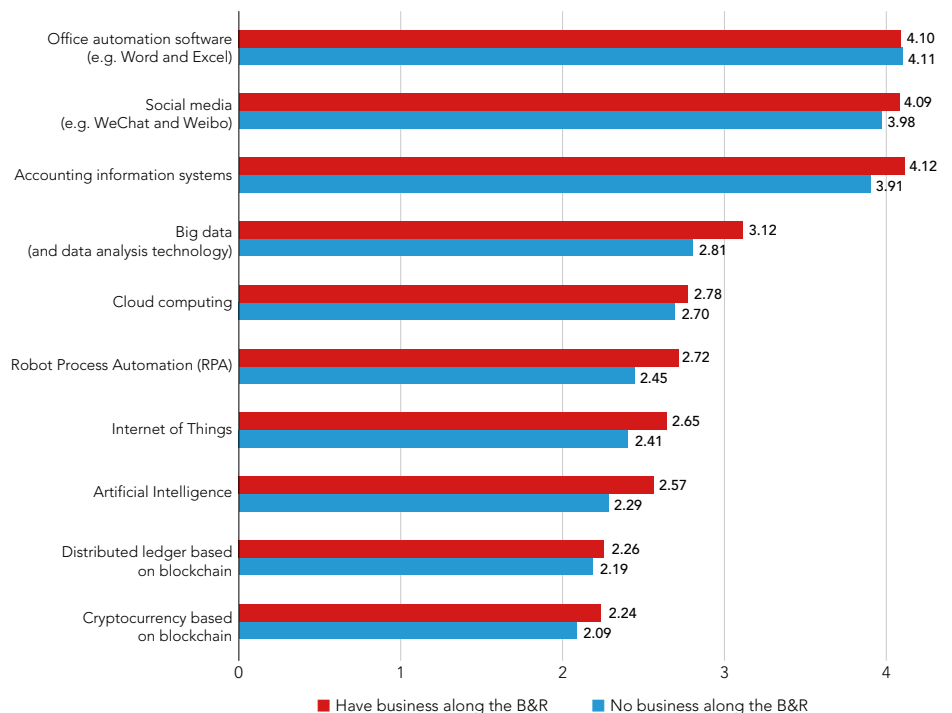
They are well aware of the popular office software (such as Word and Excel), social media (such as WeChat and Weibo) and the accounting information systems, with an average score of 4. But they have a limited knowledge of emerging technologies, with an average score of 2.54. These technologies, by familiarity, are Big Data (and data analysis technology), cloud computing, RPA, IoT, AI, and distributed ledger and cryptocurrency, the latter two based on blockchain technology. When asked about blockchain-based technologies, the respondents say that they know very little, and over 35% of the respondents say they do not understand blockchain technology at all. In April 2017 ACCA published a report *Divided we fall distributed we stand: the professional accountant's guide to distributed ledgers and blockchain*. This set out ways in which the accountancy profession could be changed by this technology. Over the past three years, the development of blockchain has been getting faster. As a matter of fact, it has developed from proof of concept to some real application scenario tests. Some companies have even turned such tests into feasible applications. We anticipate that large-scale application of blockchain will be realised in some areas. In the foreseeable future, we expect more enterprises to

focus more on the large-scale application of blockchain technology, as well as its risk control and governance.

The respondents of companies already engaged in BRI businesses know more about information technologies than companies that have not yet engaged. The disparity in their understanding of the top three familiar technologies is no greater than 6% (with an average score of

4.11, 4.05 and 4.04 respectively); however, the respondents of companies already engaged in BRI businesses know more about emerging technologies (blockchain not included) than companies that have not yet engaged, with a disparity of more than 10%; for the respondents from both types of companies, their understanding of the blockchain technology is very limited, with little difference.

FIGURE 28: Respondents by familiarity with technologies



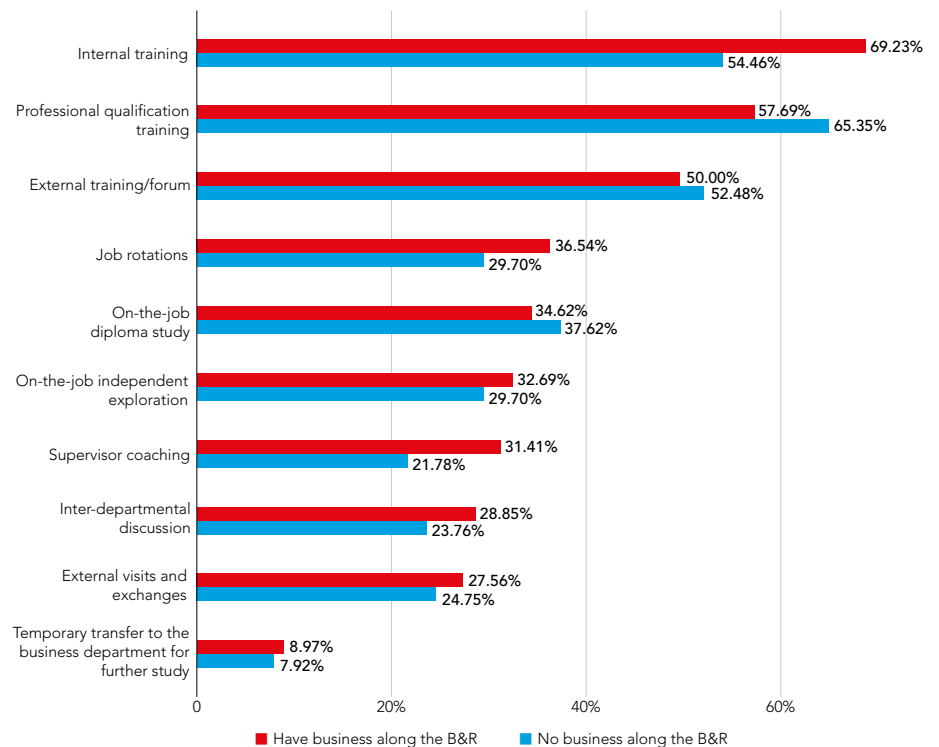
The survey indicates that the most common training methods in digital competencies of accounting talents are internal training, professional qualification training, and external training/forum.

In terms of the industry, the respondents of companies in the financial service and energy industries have a better understanding of the informational technology, with a score above the average, reaching 3.25 and 3.17 respectively; those in the industrial manufacturing and engineering & construction industries, however, score below the average at 2.85 and 2.69 respectively.

(II) TRAINING METHODS OF THE RESPONDENTS IN DIGITAL COMPETENCIES OF ACCOUNTING TALENTS

The training methods referred to in the questionnaire include internal training, professional qualification training, external training/forum, job rotations, on-the-job diploma study, on-the-job independent exploration, supervisor coaching, inter-departmental discussion, external visits and exchanges, temporary transfer to the business department for further study. The survey indicates that the most common training methods in digital competencies of accounting talents are internal training, professional qualification training, and external training/forum (Figure 29).

FIGURE 29: Respondents by training methods in digital competencies



In an increasingly complicated environment of technological application, the respondents have even higher demands for improving their ability to acquire digital knowledge and skills.

According to the survey, ACCA has identified the most common training methods used by different types of businesses (Figure 30).

In 2013, ACCA and SNAI jointly released the report *Management Accounting Talents Training Modes in Chinese Enterprises*. The most popular way of

training is on-the-job independent exploration, which is suitable for the staff who know how to use the related software, cost management tools and data analysis techniques. In an increasingly complicated environment of technological application, the respondents have even higher demands for improving their ability to acquire


digital knowledge and skills. On-the-job independent exploration (chosen by nearly 32% of the respondents) can no longer fully satisfy the needs of these accountants. Instead, the respondents expect to upgrade their digital skills through more systematic and comprehensive professional training.

FIGURE 30: Comparison of the three most common training modes in businesses

INDUSTRY	TRAINING MODES		
Financial Service	Professional Qualification Training	External Training/Forum	Internal Training
Industrial Manufacturing	Professional Qualification Training	Internal Training	External Training/Forum
Other	Internal Training	Professional Qualification Training	External Training/Forum

SCALE OF REVENUE	TRAINING MODES		
USD 100 million or less	Professional Qualification Training	Internal Training	External Training/Forum
USD 101 – 999 million	Internal Training	Professional Qualification Training	External Training/Forum
USD 1 – 4.999 billion	Professional Qualification Training	External Training/Forum	Internal Training
USD 5 – 9.999 billion	Internal Training	Professional Qualification Training	External Training/Forum
USD 10 billion or above	Professional Qualification Training	Internal Training	Job Rotations

NUMBER OF EMPLOYEES	TRAINING MODES		
More than 2,000 Employees	Professional Qualification Training	Internal Training	External Training/Forum
Less than 2,000 Employees	Internal Training	Professional Qualification Training	External Training/Forum



Implications of the US administration's tax reform plan and the BEPS Action Plan

Under the BRI, a growing number of Chinese companies are making investments overseas, which will be deeply affected by the tax system, tax reform and international tax policies in the countries along the B&R routes. Furthermore, the US tax reforms and the BEPS Action Plan have resulted in the adjustment of tax policies in these countries, and further affected the tax burdens and investment decisions of the Chinese enterprises going global.

Considering its importance, the research group has studied and analysed the implications of the US tax reforms and the BEPS Action Plan to companies, with the following key findings. In response to the US tax reform, 44% of the respondents say that the countries in which they invest have corresponding tax reforms, which involve corporate income tax, individual income tax, turnover tax and international taxation. As a result, 31% state that their corporate tax burdens have risen or remain unchanged, and 38% see their tax burden decreased; 54% of the enterprises have increased investment, 39% say their investment will remain unchanged, and only 7% consider reducing investment.

In response to the BEPS Action Plan, 67% of the respondents say that the countries where they invest have adjusted policies, with 37% involving the systems of controlled foreign companies, while the proportion of transfer pricing, anti-abuse of tax treaties and mixed mismatches accounts for around 30%. This has led to an increase in corporate tax burden for 34% of the companies and a decrease for 28% of them, with 38% seeing their tax burden remain unchanged; 41% of the companies will increase their investment, 48% will invest as they did previously, and only about 10% intend to reduce investment. Faced with US tax reform and the advancement of the BEPS Action Plan, as well as the implications for foreign investment decisions and tax burdens, companies hope that the host countries where they invest can reduce tax rates, offer tax incentives, enhance tax transparency, stability and legalisation, simplify tax collection and management procedures, and ameliorate law enforcement in order to increase corporate enthusiasm and confidence in outbound investment. At the same time, they expect China to further improve its export tax rebate and subsidy system, strengthen international tax coordination, and eliminate duplicate taxation via tax treaties so as to support the enterprises going global.

(I) IMPLICATIONS OF US TAX REFORM PLANS FOR THE TAX BURDENS AND INVESTMENTS ALONG THE B&R ROUTES

1. Summary of US tax reform

- (1) Lower the federal corporate extra progressive tax rate of 15%–35% to the flat rate of 21%.
- (2) Individual income tax will still apply to pass-through businesses, including sole proprietorships, partnerships and corporations, with the rate lowered by 20 percentage points.
- (3) The capital investment of businesses should be expensed, and is fully deductible against corporate tax for that year. This policy will be effective for five consecutive years. From the sixth year onward, the deductible proportion of investment will be reduced year by year.
- (4) The individual income tax brackets are changed from '10%, 15%, 25%, 28%, 33%, 35% and 39.6%' to '10%, 12%, 22%, 24%, 32%, 35% and 37%'.
- (5) The standard deduction of individual income tax is 'doubled' from USD 6,500 to USD 12,000 for single filers, and from USD 13,000 to USD 24,000 for married couples filing jointly.
- (6) The personal tax exemptions at USD 4,050 per person are repealed.

In a globalised world, the US tax reform will trigger similar tax system reforms in other countries and further restructure the international taxation order. In fact, this trend is already emerging.

(7) The territorial tax system will be implemented. The dividends of foreign companies with more than 10% of their stake controlled by American businesses may be exempted from taxation.

(8) The overseas profits of multinational companies repatriated to America will be taxed at a one-time lower rate of 15.5% for cash and cash equivalents, and 8% for non-cash assets.

(9) The base erosion and anti-abuse tax will apply to the payments made by American businesses to their overseas affiliated businesses at a rate of 5% in 2018, 10% from 2019 to 2025, and 12.5% after 2026.

(10) The revenue of a business from intangible overseas assets will be taxed at a lower rate.

2. The tax reforms in the countries along the B&R routes

The US tax reform focuses mainly on corporate income tax, individual income tax and international taxation. While simplifying the tax system, with many tax deductions and some increases, the plan is to lower the tax burdens of businesses in the hope of attracting American businesses and capital to return to, and the capital of other countries to flow to America. In a globalised world, the US tax reform will trigger similar tax system reforms in other countries and further restructure the international taxation order. In fact, this trend is already emerging.

In our survey, among the 156 companies with operations along the B&R routes, 44 see a reform of corporate income tax in

their host countries, 21 see an individual income tax reform, 27 a turnover tax reform, 24 an international taxation reform and 12 other reforms. Five companies have experienced a reform in all the tax areas above in their host countries, with 87 seeing no reforms. About 44% of our respondents say that their targeted countries of investment have implemented tax reforms. It's important to note that we have no country-specific data of their tax reforms in response to the US tax reform as the data is unavailable. However, there is no apparent difference among South East Asia, South Asia, Central Asia, the Middle East, Central and Eastern Europe, and Russia.

Typical business cases

(1) A retail company in South East Asia with an annual revenue between USD 1–5bn and more than 5,000 employees says that its host country has enacted reforms of corporate income tax, individual income tax, turnover tax and international taxation, with huge tax cuts.

(2) A construction company with an annual income of USD 1–5bn and 2,000 to 5,000 employees says that the host region has reduced the frequency and effort of tax inspections. The company has investments in South East Asia, South Asia and the Middle East, and is engaged in infrastructure construction.

(3) An energy company investing in Bangladesh with an annual income of USD 5–9.999bn and more than 5,000 employees says that a new value-added tax law went into force as of July 1, 2017

in Bangladesh, with various measures (e.g. expanding the scope of VAT exemptions) to improve the local business environment.

Some companies say that the host countries have implemented tax reforms, only not directly related to tax reform in the US.

(4) An industrial manufacturer states that its host country has begun to collect royalties, which however is not a direct response to the tax reform in America. The company has invested in Central Asia, Central and Eastern Europe and Russia, and is engaged in the infrastructure construction business.

(5) Another industrial manufacturer believes that the tax reform of each country is mainly stimulated by the changes in that country's financial and economic situation, rather than directly related to the tax reform in America.

In addition, as the US tax reform has fairly recently been implemented, many countries have not yet launched the corresponding tax reforms.

(6) A company investing in South East Asia, South Asia and Central Asia says that although US tax reform may influence the world, the tax system in the countries along the B&R routes will remain unchanged in the short term, as the regions where it has invested are not sufficiently linked to the global economy, and most of them are still developing areas.

The tax reforms in the investment destination countries will affect the tax burdens of businesses, and further influence the corporate investment decisions.

3. Implications to the tax burdens of businesses

The tax reforms in the investment destination countries will affect the tax burdens of businesses, and further influence the corporate investment decisions. According to our survey, there are 23 companies suffering higher tax burdens due to tax reforms, 28 with lower tax burdens, 23 with tax burdens unchanged, and 82 with uncertain tax burdens. In the 74 most-affected companies, 31% of them have higher tax burdens, 31% have tax burdens unchanged, and 38% have lower tax burdens. Moreover, 22 companies have increased their investment under tax reforms, 3 have reduced their investment, 16 keep their investment unchanged, and 115 have uncertain investment. Among the 41 companies whose investment have been greatly affected, 54% of them have increased their investment, 39% kept their investment unchanged, and only 7% or three companies are considering reducing their investment.

Typical business cases

(1) A company with an annual income of USD 5–9.999bn and 2,000 to 5,000 employees says that it will increase investment, mainly because its invested regions are mostly located in the developing countries, with a rapid rate of economic growth and ample space for development. Having made investment in South East Asia, South Asia and Central Asia, the company is engaged in financial service and government & public service.

(2) An energy company investing in Bangladesh with an annual income of USD 5–9.999bn and more than 5,000

employees says that foreign investment is likely to increase as the country has implemented preferential VAT policies and lowered the tax burdens for investors.

(3) An energy company with an annual income of less than USD 100m, and no more than 500 employees suggests that the structure of its investment destinations will be changed as it faces uncertain tax burdens. Its major investment business will be transferred from America to other countries. The company has made investments in South East Asia, Central and Eastern Europe and Russia.

(4) A construction company with an annual income of USD 100–999m and 2,000 to 5,000 employees says that in spite of a lowering tax burden, it needs to be more conservative and keep the investment unchanged, as it has not completely integrated into the local market. This infrastructure construction company has invested in South East Asia and Africa.

(5) An industrial manufacturing and energy company with an annual income of more than USD 10bn and 500 to 2,000 employees suggests that the slow recovery of global economy has imposed considerable financial pressure on many countries. For most of the developing countries, to raise the tax burdens, particularly those of foreign investment projects, is a direct and effective way of countering that pressure. Therefore, the foreign investment might be reduced owing to the growing tax burdens. The company has invested in South East Asia, South Asia, Central Asia, Middle East, Russia and Africa. It mainly engages in infrastructure construction and bulk commodity trade.

(II) IMPLICATIONS OF THE BEPS ACTION PLAN ON THE TAX BURDENS AND INVESTMENTS ALONG THE B&R ROUTES

1. About the BEPS Action Plan

Led and promoted by the OECD, the BEPS (Base Erosion and Profit Shifting) Action Plan is an international taxation Action Plan endorsed by the G20 state leaders aiming to jointly crack down on international tax evasion. The Action Plan includes 15 actions under five major categories, such as 'addressing the tax challenges of the digital economy', 'coordinating the corporate income tax systems of different countries', 'reshaping the current tax treaties and align international transfer pricing rules', 'enhancing tax transparency and certainty', and 'developing a multilateral instrument to promote the actions'.

(1) Digital economy. The Action Plan is intended to address the tax challenges of the digital economy.

(2) Hybrid mismatch. The OECD wants to prevent and crack down on the actions of taxpayers who develop 'hybrid mismatch' tax planning, exploiting the different rules on the same financial instruments, asset transactions and entities that apply under the tax laws of various countries to achieve double non-taxation.

(3) CFC rules. The CFC (controlled foreign corporations) system is used to prevent taxpayers from transferring profits to the CFCs in low-tax countries for tax evasion or tax deferral. The profits should also be taxed even if they have not been remitted back to the country.

The implementation of the BEPS Action Plan requires the policy support of various countries.

(4) Interest deductions. Restrict the related-party and third-party pre-tax interest deductions.

(5) Countering harmful tax practices. The OECD wants to eliminate or restrict inappropriate tax practices. Each country must judge whether there are related substantial economic activities when giving tax preference. Otherwise, no tax preference may be offered.

(6) Preventing the granting of treaty benefits. The Action Plan introduces the limitation on benefits (LOB) and principal purpose test (PPT) to prevent tax evasion through treaty abuse.

(7) Preventing the artificial avoidance of permanent establishment status. BEPS revises the related agency clause and permanent establishment exemption rules, and introduces PPT in order to prevent artificial circumvention.

(8) Transfer pricing. The Action Plan includes three actions, ie intangibles, risks and capital, and other high-risk transactions, to strengthen the Arm's Length Principle.

(9) BEPS data analysis. It improves the ability of each country to address the BEPS problems through the data analysis of transfer pricing country reports.

(10) Mandatory disclosure of tax planning. The Action Plan recommends mandatory disclosure of aggressive tax planning schemes, but requires no unified mandatory disclosure from all countries.

(11) Transfer pricing documentation. The Action Plan requires taxpayers to provide high-quality transfer pricing documentation to the tax administrations, including the main document, local document and country report. Country reports cannot be used directly for transfer pricing adjustment, but only for risk identification, monitoring and investigation.

(12) Making dispute resolution mechanisms more effective. The Action Plan ensures the effective and timely resolution of cross-border tax disputes, and the completion of dispute cases through negotiation in no more than 24 months. An arbitration clause should also be added to the model tax treaty.

(13) Developing a multilateral instrument. A multilateral law instrument should be developed for the common problems faced by various countries so as to address and amend more than 3,000 tax treaties in the world all at once.

2. Measures taken by the countries along the B&R routes in response to the BEPS Action Plan

The implementation of the BEPS Action Plan requires the policy support of various countries. According to our survey, the companies that invest in the B&R host countries have made some adjustments after the BEPS Action Plan is published. 38 companies have taken action in relation to the CFC rules, 32 for transfer pricing, 31 for prevention of treaty abuse, 30 for hybrid mismatch, 23 for interest deduction restrictions, 23 for countering harmful tax practices, 22 for prevention of

artificial circumvention for permanent establishment, 19 for mandatory disclosure, 6 for other areas, and 52 have made no adjustments. In the 104 companies facing policy changes in their host countries, 37% need to deal with changes in the CFC rules, and 30% in transfer pricing, prevention of treaty abuse and hybrid mismatch. The host countries have made policy adjustments in many areas.

Typical business cases

(1) A company with an annual income of USD 100–999m and fewer than 500 employees says that most countries have tightened the rules on the tax structure to prevent tax evasion through CFCs. The company has made investment in South East Asia, South Asia, Russia and Africa, and is engaged in infrastructure construction, bulk commodity trade and warehouse logistics.

(2) A construction company with an annual income of USD 5–9.999bn and more than 5,000 employees indicates that the host region has more rigorous reviews of the procurement price adopted by overseas parent companies to see whether it is fair, ie paying close attention to the transfer pricing measures. Having invested in South East Asia and Africa, the company is mainly engaged in infrastructure construction.

(3) Some companies also say that different countries react differently to the BEPS Action Plan. So it is hard to make a general conclusion owing to insufficient research.

The measures taken by various countries to respond to the BEPS Action Plan will lead to a change in corporate tax burdens and further influence their investment decisions.

3. Implications for corporate tax burdens and investment

The measures taken by various countries to respond to the BEPS Action Plan will lead to a change in corporate tax burdens and further influence their investment decisions. The survey shows that 28 companies report an increase in their tax burdens, 23 report a decrease in tax burdens, 31 have seen their tax burdens unchanged, and 74 have uncertain tax burdens. In the 82 companies whose tax burdens are most affected, 34% of them have suffered an increase in corporate tax burden, while 28% have had a decrease, and 38% have seen their tax burden unchanged. The measures have resulted in an increase in corporate investment for 12 companies, a decrease in investment for 3 companies, unchanged investment for 14 companies and uncertain investment for 127 companies. In the 29 companies investment decisions are most affected, 41% of them are choosing to increase their investment, 48% are investing as they did previously, and only about 10% (3 companies) intend to reduce investment.

Typical business cases

(1) A construction company with an annual income of USD 5–9.999bn and more than 5,000 employees says that its evaluation group believes more uncertainties will emerge in the BEPS Action Plan, but the economic growth rate will see no big changes. Therefore, it may consider increasing investment and preventing risks as early as possible.

Having invested in South East Asia and Africa, the company is engaged in infrastructure construction business.

(2) A construction company with an annual income of USD 5–9.999bn and more than 5,000 employees says that it has decided to increase investment as the BEPS Action Plan has improved the local tax environment. Having invested in South East Asia and Africa, the company is also engaged in infrastructure construction business.

(3) Some companies say that the loose management of taxation in the countries along the B&R routes and the restriction imposed by the BEPS Action Plan on investors have increased the uncertainties of investment. Some indicate that they will diversify their investment under the impact of the BEPS Action Plan.

(4) Some companies also say that the BEPS Action Plan will only improve tax transparency, without affecting their corporate tax burdens and investments. This proves that these companies have only a limited understanding of the BEPS Action Plan.

(III) OUTLOOK FOR THE TAX POLICIES THAT ENHANCE CORPORATE INVESTMENT ENTHUSIASM

In response to the US administration's tax reform and the BEPS Action Plan, as well as their impact on corporate investment decisions and tax burdens, we expect the introduction of the following tax policies

to enhance the enthusiasm and confidence of companies in making investments overseas, which may cover the following seven areas.

(1) The investment destination countries are expected to lower the rates of corporate income tax, individual income tax, value-added tax and customs duty, particularly implementing tax relief policies that promote infrastructure construction investment and investment recovery.

(2) The investment destination countries are expected to give some tax incentives to foreign-funded companies.

(3) The investment destination countries are expected to have a more streamlined, stable and transparent tax system under the rule of law.

(4) The investment destination countries are expected to simplify their tax collection and management procedures and further regularise their tax law enforcement.

(5) The investment destination countries are expected to reduce the restrictions on profit repatriation.

(6) China is expected to further improve its export tax rebate and subsidy system.

(7) China can be expected to sign more tax treaties to strengthen international tax coordination and reduce double taxation, with such new treaties being based on its current 102 tax treaties (agreements or arrangements).



Acknowledgement

This report is supported by the Accounting Society of China (ASC) 2018 key accounting topics research (*A Study of Accounting Problems Encountered by Companies Going Global along the B&R Routes – From the Perspective of Accounting Informatisation*).

Special thanks to:

Trainees of the National Top Accountants Program, SNAI

Trainees of the EMPAcc, SNAI

Members and partners of ACCA China

Corporate clients of Yonyou

Research team

This research is launched and completed by the SNAI 'Belt and Road' Accounting Research Center (in preparation).

Participants of the research include:

Li Kouqing	Dean, Professor, Doctoral Supervisor, Postdoctoral Co-supervisor, SNAI
Ge Yuyu	Doctor, Master Supervisor, Department of Teaching & Research, SNAI
Liu Meiling	Doctor, Master Supervisor, SNAI and Experience Center of XBRL China
Wu Zhongsheng	Doctor, Master Supervisor, SNAI and Experience Center of XBRL China
Huang Changyin	Doctor, Master Supervisor, SNAI and Experience Center of XBRL China
Li Xinning	Doctor, Master Supervisor, Department of Teaching & Research, SNAI
Tian Bei	Deputy Director, Department of Project Cooperation, SNAI
Li Yan	Senior Supervisor, Department of Project Cooperation, SNAI
Guo Feng	Senior Supervisor, Department of Teaching & Research, SNAI
Qian Yuyi	Head of Policy, ACCA China
Wang Mingjie	Policy Manager, ACCA China
Fu Jianhua	Vice President, Yonyou Network Technology Co., Ltd.
Ren Xiaohui	Product Director, Yonyou Network Technology Co., Ltd.
Zhou Gangzhan	Senior Financial Expert, Yonyou Network Technology Co., Ltd.
Zeng Ming	Financial Expert, Yonyou Network Technology Co., Ltd.
Li Chunying	Marketing Manager, Yonyou Network Technology Co., Ltd.

