

Export Readiness of Small and Medium-Sized Enterprises in Emerging Markets: A Capability-Based Conceptual Model from Kazakhstan

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ABSTRACT

In this paper, a capability-based conceptual model of SME export readiness in emerging market economies is constructed through the use of Kazakhstan as the main case study and Indonesia as the secondary one. This work applies the resource-based view of the firm, dynamic capabilities theory, the literature on SME internationalization, export readiness studies, and university-industry collaboration literature to explain how export readiness should be seen as more than financial resources, marketing strategies, or even managerial intention. Instead, this concept can be viewed as a multifunctional capability development process including human, digital, innovative, and networking capabilities. For the purposes of this study, a conceptual policy analysis approach was used by means of secondary data analysis and literature review. According to this model, university, export promotion agency, industrial, government, and digital capabilities are interrelated parts of an ecosystem of export readiness. The contribution of the paper lies in the conceptualizing of export readiness as a supported capability of SMEs and in providing policy suggestions about how to improve the role of universities in supporting exporting activities in emerging markets, such as Kazakhstan.

Keywords: export readiness; small and medium-sized enterprises; university-industry collaboration; capability-building; emerging markets; Kazakhstan.

INTRODUCTION

Small and medium-sized enterprises are known to play a critical role in generating employment, innovation, inclusivity, diversification, productivity, and economic growth, especially in developing and emerging countries (World Bank, n.d.). However, while participation in local markets guarantees that SMEs have the necessary capabilities for successful operation in domestic markets, such is not the case regarding international business. Export activities require a set of unique competences ranging from understanding foreign market demands, certification and standards, logistics, international payments, digital channels, communicating with

customers, customizing products according to market needs, and international networking capabilities.

As mentioned above, this problem is especially pertinent in the setting of emerging markets where enterprises face conditions associated with institutional complexities, poor access to specialized information, limited resources, insufficient digitalization levels, and weak international networks. Under these circumstances, many SMEs might possess goods that could be attractive to other markets and have entrepreneurial spirit, but fail to develop a level of capability required for successful sustainable export operations. Thus, we observe the emergence of an export-readiness gap.

Kazakhstan is an appropriate context to analyze the problem. The country is striving towards shifting from its resource-dependent model of economic growth to a more diverse and private sector-centered approach (World Bank, 2026). Thus, promoting export diversification becomes one of the key concerns. According to OECD (2024), Kazakhstan develops policies aimed at enhancing its export capability and leveraging its geographical location as a transit point for major commercial corridors. At the same time, OECD (2024) states that the country's export diversification efforts have not been completely successful and export promotion programs need to be improved.

There are already a significant number of SMEs in Kazakhstan. According to the statistics published by Bureau of National Statistics of the Republic of Kazakhstan (2026), the proportion of SMEs in the country's GDP rose from 38.9% in 2024 to 40.9% during January-December 2025. Nevertheless, being active participants in domestic economic processes does not ensure export competitiveness of these firms. It is important to distinguish between the development of domestic SMEs and their ability to operate internationally.

Institutions providing export-related services and support mechanisms include various programs. In particular, the platform Export.gov.kz offers access to financial measures, consulting and analytics, service measures, export acceleration opportunities, interactive analytics, barrier navigation services, and logistics (QazTrade / Export.gov.kz, n.d.). Furthermore, Export Credit Agency of Kazakhstan is officially defined as the sole operator of non-primary export promotion with a mission to support growth of Kazakhstan's non-primary exports (Export Credit Agency of Kazakhstan, n.d.). Moreover, QazTrade offers consulting services and export acceleration as well as helping exporting firms to enter foreign markets (QazTrade, 2026a).

These institutions are important and useful, but still, they might not help companies to leverage their capabilities to utilize the benefits offered. Export readiness is not just about trading, finance, and promotion. It implies certain capability development that presupposes human capital, technological, innovation, and networking capabilities.

It is suggested that education, technology, and university-industry collaboration can make more significant contributions to improving SME export readiness. Universities should not only engage in research and teaching. These institutions can provide education and trainings to entrepreneurs, develop digital expertise among employees of SMEs, conduct applied research, offer consulting services, facilitate university-industry cooperation through student-industry projects, provide SMEs with support for establishing and operating business incubators, and provide research-based policy-making advice. Technologies, in turn, can facilitate market analysis, promote eCommerce, facilitate communication with buyers, improve decision-making through the collection and processing of data, and serve as tools for online learning. Thus, education, technology, and university-industry cooperation can become important capability enhancement tools.

The gap that should be addressed in this study is the conceptual gap between export readiness, digital capabilities, and university-industry collaboration in emerging economies. While export readiness often discusses firm capabilities, export barriers, export marketing capabilities, and export-related public policies, university-industry relations and technologies rarely play the central role in these discussions. This paper addresses the following **research questions**:

RQ1: What capabilities are required for the export readiness of SMEs in emerging-market contexts?

RQ2: How can education, technology, and university-industry collaboration supports the development of these capabilities?

RQ3: What policy mechanisms can strengthen SMEs export readiness in Kazakhstan and comparable emerging markets?

The objective of this research paper is to create a capability-based conceptual framework that will help to foster SMEs' export readiness. Kazakhstan is taken as the main example while Indonesia is used to extend the analysis. This paper can be considered valuable because it conceptualizes the issue of export readiness as a capability within an ecosystem.

THEORETICAL BACKGROUND AND LITERATURE REVIEW

2.1 SME Export Readiness as a Capability

Export readiness is defined as having sufficient capabilities in order to enter, survive, and operate in foreign markets. Readiness for exporting does not just involve willingness to export but includes many other aspects such as manager readiness, product readiness, readiness to execute, financial readiness, market readiness, standardization readiness, digital readiness, and network readiness.

A recent study also backs up this definition of export readiness. In particular, the study by Gerschewski, Rose, and Scott-Kennel (2020) identifies several dimensions of export readiness for SMEs and shows how

export readiness influences subsequent export performance. Hence, export readiness should be considered before evaluating export results.

From a theoretical point of view, the concept of export readiness can be viewed through the prism of the resource-based view. According to this theory put forward by Barney (1991), a company gains competitive advantages when its resources are valuable, rare, imperfectly imitable, and non-substitutable. Thus, export performance depends not only on external factors but also on the availability of certain internal resources.

In particular, these resources could include skilled managers, informed employees, high-quality products, innovation processes, market intelligence, digital skills, and network capabilities. The mentioned resources become very relevant for SMEs that lack human, financial, and organizational capacity. Hence, SMEs' export readiness is a firm-level capability that allows exploiting external opportunities.

Moreover, the idea of dynamic capabilities theory can complement the resource-based view. According to Teece, Pisano, and Shuen (1997), dynamic capabilities are about firms' capability to integrate, create, and reconfigure both internal and external competencies. Eisenhardt and Martin (2000) define dynamic capabilities as a set of identifiable organizational capabilities including product development, decision making, and alliance building. According to Teece (2007), dynamic capabilities are responsible for generating intangible assets that guarantee companies' performance in changing environments.

It becomes apparent why these theories are relevant to SMEs entering foreign markets. Namely, entering new markets implies adaptation to customer needs, regulations, logistics, technology changes, and competition. This way, export readiness could also be defined as a dynamic capability-building process.

2.2 SME Internationalization, Learning, and Networks

SME literature on internationalization recognizes the significance of learning and networks. According to the revised model of Uppsala by Johanson and Vahlne (2009), there are four factors that contribute to internationalization, such as learning through experience, knowledge about a market, gradual commitment, and business networking. Moreover, the notion of "liability of outsidership" is particularly applicable to internationalization challenges experienced by SMEs from emerging markets who might find themselves lacking not a product but trustable connections within a foreign market environment.

Export barriers literature further explains the challenges that are experienced by SMEs due to difficulties in internationalization processes. Leonidou (2004) identifies several types of barriers, such as informational, functional, procedural, governmental, task-related, and environmental barriers that hinder small firm export activities. Furthermore, Narayanan (2015) stresses that export barriers are multidimensional and represent

constraining factors that limit SMEs in their export activities. Later review evidence suggests that export barriers experienced by SMEs are multidimensional and cover knowledge barriers, resource barriers, managerial barriers, marketing barriers, institutional barriers, and external market barriers (Paul, Parthasarathy, & Gupta, 2017).

An example of export barriers experienced by SMEs could be illustrated by the QazTrade Accelerator programme. It presents itself as support in preparing export products, including choosing an export direction, developing a standard for exports, identifying customers, preparing contracts, and arranging logistic routes (QazTrade / Export.gov.kz, n.d.). Hence, export barriers include a wide array of knowledge, processes, partnerships, and operations that require specific preparations.

2.3 Export Readiness, Export Outcomes, and Innovation Capability

Export readiness should be distinguished from export performance. Cavusgil and Zou (1994) show that export market performance is connected to strategy, firm resources, international competence, and managerial commitment. Morgan, Katsikeas, and Vorhies (2012) further show that export marketing capabilities help firms implement export strategies and improve export venture performance. These studies support the argument that export outcomes depend on capabilities developed before and during market entry.

Therefore, the assessment of SME export readiness should include capability indicators such as market knowledge, digital marketing competence, product adaptation, managerial commitment, and network access, rather than focusing only on immediate export transactions.

Innovation capability is also central to SME internationalization. Knight and Cavusgil (2004) show that innovation and organizational capabilities are important for firms that internationalize rapidly and compete in global markets. This reinforces the argument that SMEs need more than access to markets; they also need the ability to adapt, innovate, and create value for international customers.

The case of Goldman and Young LLP provides a local illustration of this readiness-to-outcome logic. QazTrade reported that the company participated in the Export Acceleration Program in 2022 and later signed a long-term export contract with the Russian distributor Clean Master following B2B meetings and marketing support within the programme (QazTrade, 2022). This programme-reported case should be interpreted as an illustrative example rather than causal evidence, but it suggests how export acceleration may connect readiness activities, partner search, negotiations, and export transactions.

2.4 University–Industry Collaboration and the Triple Helix

The notion of university-industry collaboration implies the exchange of knowledge and cooperation between universities and industry organizations. According to the Organisation for Economic Co-operation and Development (OECD, 2019), there are numerous avenues of university-industry collaboration that may include collaborative research, contract research, consultancy, intellectual property exchange, labor mobility, spin-offs, networking, access to facilities, and continuing education.

Academic literature also supports the idea that universities function as knowledge-transfer agents. Specifically, Perkmann et al. (2013) found that university-industry interactions are broader than commercialization and may also cover academic engagement through collaborative research, contract research, consulting, and personal relationships. Ankrah and Al-Tabbaa (2015) performed a systematic review suggesting that university-industry collaboration might have numerous motivations, channels, and outcomes. Additionally, Cohen, Nelson, and Walsh (2002) demonstrated how public research may affect industrial R&D through different channels.

In terms of the SME export readiness, university-industry collaboration is especially relevant since many SMEs might not possess research capacity, knowledge on exports, IT skills, and training programs. Universities may fill this gap through entrepreneurship education, executive education, applied research, consulting, student projects, incubation, and policy-related analyses.

The ecosystem approach of the present study is based on the triple helix concept. Namely, Etzkowitz and Leydesdorff (2000) state that innovation becomes increasingly based on interdependence between universities, industry, and government. Thus, applying the triple helix framework to SME export readiness suggests that universities, businesses, and export-support institutions should cooperate with each other and thus strengthen capability-building processes by combining knowledge and policies, policy instruments, technology and business support tools.

This means that universities should be involved more directly into the development of Kazakhstan's export infrastructure. The establishment of SME export-readiness clinics at universities would enable firms to conduct market research, evaluate the necessity of modifying their products, analyze their websites for digital competence, and create a rough export-readiness plan. Consultancy projects carried out by students might be organized by QazTrade, Export.gov.kz, chambers of commerce, or other organizations involved in exporting.

Jonbekova, Sparks, Hartley, and Kuchumova (2020) suggest that collaboration between universities and firms in Kazakhstan is influenced by policy expectations and institutional barriers. As a result, it is still difficult for universities and businesses to establish deep research and innovation collaboration. It confirms the idea that universities might play an important

role in capability-building if collaboration processes would be systematically incorporated into export support infrastructure.

2.5 SME Digital Transformation

Digital transformation has become increasingly important for SMEs. The OECD (2021) notes that SME digitalization is multifaceted and involves different technologies, organizational practices, and strategic assets. Digital technologies can support productivity, market access, business model development, customer communication, and innovation. However, SMEs often face barriers to more advanced digital adoption, including limited skills, resources, awareness, and organizational capabilities.

This perspective is important for export readiness because digital tools can support market research, customer communication, online promotion, e-commerce, data-based decision-making, and participation in digital platforms. At the same time, access to technology is not the same as digital capability. SMEs need digital literacy, digital marketing skills, data awareness, cybersecurity awareness, and managerial capability to integrate digital tools into business strategy.

Local policy examples in Kazakhstan show the growing role of digital export support. Export.gov.kz includes digital instruments such as interactive analytics, a barrier navigator, logistics-related tools, and information on export acceleration (QazTrade / Export.gov.kz, n.d.). In addition, the Ministry of Trade and Integration reported QazTrade initiatives connected to export acceleration and the inclusion of Kazakhstani suppliers on international electronic platforms such as Alibaba.com (Ministry of Trade and Integration of the Republic of Kazakhstan, 2022). These examples illustrate that digital tools are increasingly part of export-support infrastructure.

Digital readiness should therefore be treated as part of export readiness. Digital tools may reduce distance and expand access to foreign markets, but they are most useful when firms possess the knowledge and routines required to use them effectively.

2.6 Emerging-Market Constraints and Ecosystem Logic

There are unique constraints faced by emerging markets that have an impact on the internationalization of SMEs. Such constraints include institutional complexities, limited finance, inadequate digital facilities, limited management expertise, regulatory risks, and limited knowledge management. All of these can make it difficult for companies to become ready for exportation.

Export diversification is one of the main policy issues in Kazakhstan. In this regard, OECD (2024) notes that Kazakhstan has created institutions and policies geared towards supporting export diversification, but it must focus more on developing its export promotion system, providing additional support for SME exporters, improving its capability development and

financial instrument development, boosting its network outside its borders, digitizing operations, and enhancing its monitoring and evaluation practices. Thus, there are significant requirements for export diversification in terms of the development of capabilities in standards and certifications, digitization, market knowledge, and international networks. The above scenario makes it clear that emerging markets need capability building. Besides gaining access to finance or participating in export promotion initiatives, the firms need structured support in developing the necessary capabilities for exportation.

METHODOLOGY

The current study is designed to follow a conceptual policy analysis framework. Conceptual papers are used in situations where there is a need to synthesize available knowledge and create constructs, propositions, and frameworks for further research (Jaakkola, 2020; Whetten, 1989). In the present case, the goal is not empirical testing of any causality, but the construction of a conceptual model of SME export readiness that can be applied in emerging markets.

The study combines a process of theoretical synthesis and document-based policy analysis. Relevant academic literature was reviewed to identify export-readiness capabilities of SMEs. Meanwhile, policy documents and institutional sources were used to embed the conceptual model into the Kazakhstani context, which is characterized by the development of a vibrant SME sector, export diversification policy, and evolving export support. Kazakhstan was chosen due to the fact that it possesses all three mentioned elements and, therefore, serves as a good case study for developing a policy-oriented model of SME export readiness. Sources are relevant due to their coverage of SME internationalization, export readiness capabilities, university-industry collaboration, SME digitalization, and Kazakhstan-specific export policies. The element of Indonesia's export policy and practices was included into the analysis as a comparative extension and is illustrative, not empirical.

The analysis is performed via a four-step procedure. First, relevant theoretical constructs are identified using the literatures on resource-based view and dynamic capabilities theory, literature on SME internationalization, export barrier literature, literature on export marketing capabilities, SME digital transformation literature, literature on university-industry collaboration, and Triple Helix theory. These literatures are relevant since they cover different aspects of SME export readiness, such as resourcefulness, adaptability and learning, export readiness and market entry, digital capability, and ecosystem collaboration respectively. Second, identified theoretical constructs are translated into export readiness capabilities, which allows identifying four main capabilities as a central part of export readiness: human capital capability, digital capability, innovation capability, and networking capability. These capabilities are

relevant since they recur in literature on SME internationalization, export barriers, digitalization, and university-industry collaboration.

Third, relevant Kazakhstani institutions responsible for the country's export support infrastructure are identified, namely statistics of SME development provided by the Bureau of National Statistics of the Republic of Kazakhstan, export diversification analyses prepared by the OECD, materials on diversification and private sector development prepared by the World Bank, information about export support measures posted on Export.gov.kz, institutional description of the Export Credit Agency of Kazakhstan, and QazTrade materials on export acceleration. Finally, based on the obtained data, a conceptual model and propositions are developed together with assessment criteria. Comparative perspective related to Indonesia is provided.

Table 1:
Methodological Design of the Study

Element	Description
Research design	Conceptual policy analysis based on literature synthesis and document-based analysis
Main purpose	To develop a conceptual capability-based model of SME export readiness
Theoretical sources	Resource-based view, dynamic capabilities theory, SME internationalization literature, export barrier research, export marketing capability literature, SME digital transformation studies, university-industry collaboration literature, and Triple Helix theory
Policy and institutional sources	Bureau of National Statistics of Kazakhstan, OECD, World Bank, QazTrade, Export.gov.kz, Export Credit Agency of Kazakhstan, and selected Indonesian institutional sources
Source selection logic	Sources were selected based on relevance to SME internationalization, export-readiness capabilities, university-industry collaboration, SME digitalization, and Kazakhstan's export-support policy context
Analytical logic	Thematic synthesis and mapping of recurring concepts into capability dimensions
Main capability categories	Human capital capability, digital capability, innovation capability, and networking capability
Comparative scope	Kazakhstan as the primary illustrative case; Indonesia as a brief comparative extension

Element	Description
Limitation	No primary survey, interview, or causal impact evaluation data

Source: Authors' design based on conceptual article methodology and literature review guidance (Jaakkola, 2020; Webster & Watson, 2002; Whetten, 1989).

CONCEPTUAL MODEL AND PROPOSITIONS

The conceptual framework is formulated through association of the capability dimensions identified in the literature with the institutional structures observed in the export-enabling ecosystem of Kazakhstan. As per the literature review, the capability dimensions are four and include human capital capabilities, digital capabilities, innovation capabilities, and network capabilities; however, the policy analysis reveals the enabling mechanism in the areas of education, technology, export promotion, and university-industry linkage.

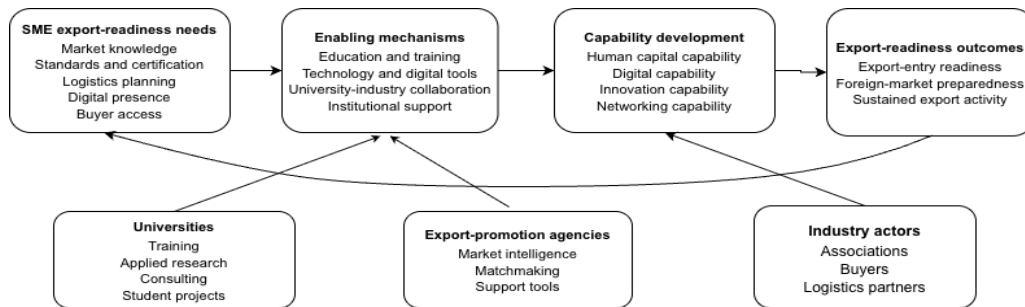
4.1 Proposed Capability-Based Model for Building Export-Ready SMEs

In this research paper, an export readiness capability-based conceptual model is offered for SMEs in Kazakhstan, as well as other emerging economies. In accordance with this model, it is asserted that SMEs attain their state of export readiness as a result of four different capabilities development: human capital, digital, innovation, and networking capabilities.

Such capabilities arise from the existence of three facilitative mechanisms: education, technology, and university-industry partnership. Education increases knowledge, skills, and management readiness. Technology promotes internet connection, intelligence on the market, communication, and evidence-based decisions making. Partnership between universities and industries connects academic competence with practice and enables knowledge conversion to export readiness capability.

The suggested conceptual model regards export readiness as an ecosystem-based phenomenon and not only an organizational one.

Figure 1:
Capability-Based Model for Building Export-Ready SMEs

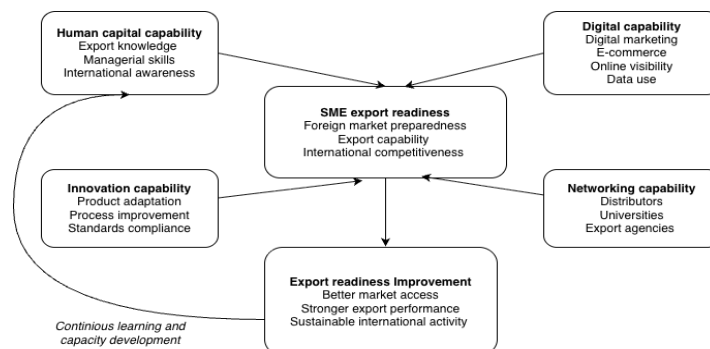


Source: Authors' elaboration based on the resource-based view, dynamic capabilities theory, SME export-readiness research, SME export-barrier literature, export marketing capability literature, university-industry collaboration literature, Triple Helix theory, and Kazakhstan export-policy sources (Barney, 1991; Cavusgil & Zou, 1994; Eisenhardt & Martin, 2000; Etzkowitz & Leydesdorff, 2000; Gerschewski et al., 2020; Leonidou, 2004; Morgan et al., 2012; OECD, 2019, 2021, 2024; Paul et al., 2017; QazTrade / Export.gov.kz, n.d.; Teece, 2007; Teece et al., 1997).

The model begins with the recognition of the needs for export readiness of SMEs, which then proceed to be met via educational support, digital means, partnerships between universities and industry, as well as institutional support. The desired result of the process is more than merely participating in the export promotion program but rather increased readiness of SMEs to participate in international business.

There are four interlinked dimensions in the development of capabilities that can be seen in the model, namely: human capital capability, digital capability, innovation capability, and networking capability. These capabilities can be viewed as main mechanisms for SMEs to transform support systems into their export readiness abilities. They are distinct from each other, yet complementing and reinforcing one another.

Figure 2:
Four Capability Dimensions of SME Export Readiness



Source: Authors' synthesis based on the resource-based view, dynamic capabilities theory, SME internationalization literature, export-barrier research, and export marketing capability literature (Barney, 1991; Johanson & Vahlne, 2009; Leonidou, 2004; Morgan et al., 2012; Teece et al., 1997).

Human capital capability refers to the level of knowledge, expertise, management preparation, and international awareness required for embarking on exporting activities. Digital capability is associated with the effective use of digital technologies, online tools, digital marketing, and data analytics. Innovation capability is the ability of a company to innovate its product range, manufacturing process, packing, and business proposition in accordance with the needs of foreign markets. Networking capability refers to building contacts with buyers, distributors, industry groups, universities, and export promotion organizations among others in order to gain entry into international markets. These four capabilities collectively form the base for the export readiness of SMEs. At the same time, they provide a useful tool to measure the export readiness of SMEs.

4.2 Conceptual Propositions

Based on the literature review and Kazakhstan policy context, the paper proposes the following conceptual propositions:

Proposition 1: SME export readiness depends on the development of human capital, digital, innovation, and networking capabilities.

Proposition 2: University–industry collaboration can contribute to SME export readiness by strengthening knowledge transfer, applied learning, innovation support, and managerial capability development.

Proposition 3: Digital tools may improve SME export readiness when firms possess the organizational and managerial capabilities to use them strategically.

Proposition 4: Export-promotion programmes are more likely to strengthen SME export readiness when they are integrated with universities, industry associations, and digital capability-building mechanisms.

Proposition 5: In emerging-market contexts, export readiness is best understood as an ecosystem-supported capability rather than as a purely firm-level condition.

These propositions provide a basis for future empirical testing through SME surveys, interviews, case studies, or mixed-methods research.

DISCUSSION

5.1 Capability Dimensions and Training Needs

The first aspect of this model involves determining the training needs for SMEs with respect to export readiness. Several capability areas have to be covered before an SME can be considered prepared for exporting.

To begin with, an SME requires knowledge about export management. It should know how to manage exports in terms of procedures, documentations, customs regulations, logistics, financial arrangements, and risks involved in exporting.

Secondly, there is a need for foreign market knowledge. This entails market research, market segmentations, competitors analysis, price determination, product adjustments, and culture. An enterprise successful in its domestic market may not necessarily understand what the foreign consumer demands from its product.

Thirdly, there is a need for the knowledge on standards and certifications. Many international markets have certain standards of quality and certifications. The lack of such knowledge might prevent firms with competitive products from entering target markets because of non-conformity.

Fourthly, there is a need for digital capability. This encompasses digital marketing, e-commerce capabilities, digital communication, big data, cybersecurity, and platform competence. Digital capability becomes more important with time since SMEs can employ digital channels to engage with their customers.

Finally, there is a need for negotiation and network capability. An export process involves interacting with many people, such as buyers, distributors, logistics companies, certification agencies, and governmental support agencies; therefore, negotiating capability is crucial.

5.2 Role of Universities, Industry, and Export-Support Institutions

This one cannot be humanized. Rejected by system

Universities can play several roles in the proposed model. They can provide entrepreneurship and international business education, offer executive education for SME owners and managers, conduct applied research and consultancy, organize student–industry projects, and contribute to evidence-based policy.

For Kazakhstan, these roles could be institutionalized through joint SME export-readiness clinics, university-based export diagnostics, student consulting projects for SMEs, executive training modules on export management and digital trade, and university participation in the monitoring and evaluation of export-support programmes.

Industry also has a central role. Firms are not passive recipients of support. They must identify weaknesses, participate in training, share information with universities, test recommendations, and invest in internal capability development. Industry associations can coordinate sector-specific cooperation by identifying common barriers, communicating firm needs to policymakers, organizing joint training, and connecting SMEs to export-promotion agencies, universities, and international partners.

Government institutions and export-promotion agencies provide the policy and institutional environment for SME export readiness. Their role

includes policy coordination, financial instruments, advisory services, market intelligence, export diagnostics, digital tools, and access to international networks.

QazTrade's Export Acceleration Program provides a practical example of capability-oriented support. QazTrade (2026a) describes the programme as one of the key instruments of state policy aimed at developing non-resource exports and building sustainable export-oriented companies. The programme includes export-readiness diagnostics, target-market analysis, product and packaging adaptation, identification of foreign partners, organization of business negotiations, and support for export transactions.

A concrete case illustration reported by QazTrade is Goldman and Young LLP, a Kazakhstani producer of professional household chemicals. According to QazTrade (2022), the company participated in the Export Acceleration Program in 2022 and later signed a ten-year export contract with the Russian distributor Clean Master for the supply of professional household chemicals for the Burger King chain. Within the programme, B2B meetings were held with partners in several target markets, and support was provided for marketing-campaign preparation. This case illustrates how export-readiness support may connect firm-level preparation with buyer identification, marketing support, business negotiations, and contract formation. However, because the evidence is based on a single programme-reported case, it should be interpreted as an illustrative example rather than causal evidence of programme impact.

A programme-level illustration is provided by QazTrade's 2025 results. According to QazTrade (2026b), 120 companies from 14 sectors participated in the export acceleration programme in 2025. The programme covered the exporter's journey from diagnostics and training to negotiation support and export contracts. QazTrade also reported that participating companies signed export contracts totaling USD 180 million by the end of 2025. Around 80 percent of participants in support programmes were small and medium-sized enterprises. This evidence should be interpreted as programme-level descriptive evidence rather than causal evidence of impact. Nevertheless, it illustrates that export acceleration can operate as a structured capability-building mechanism.

These examples suggest that export promotion can be designed as capability-building rather than only promotion. Such programmes may become more effective if connected to universities, industry associations, innovation hubs, and digital learning tools.

5.3 Digital Tools and Capability-Based Assessment

Digital tools emerge as a cross-cutting factor in the model. Digital tools could help improve the SMEs' readiness to export through actions like market research, communication with buyers, marketing over the Internet, e-commerce, data-based decisions, digital learning, and monitoring of the program. Nevertheless, the use of digital tools would depend on the digital capabilities of the companies. According to OECD (2021), digitalization for

SMEs need organizational capabilities and proper application and not simply technology alone. Hence, digital tools must be integrated into the training and counseling programs.

In addition, a capability-building model requires assessment metrics. An export promotion program should not only measure the number of companies participating in training or trade fairs but also how well they build their capabilities.

Table 2:
Assessment Indicators for SME Export Readiness

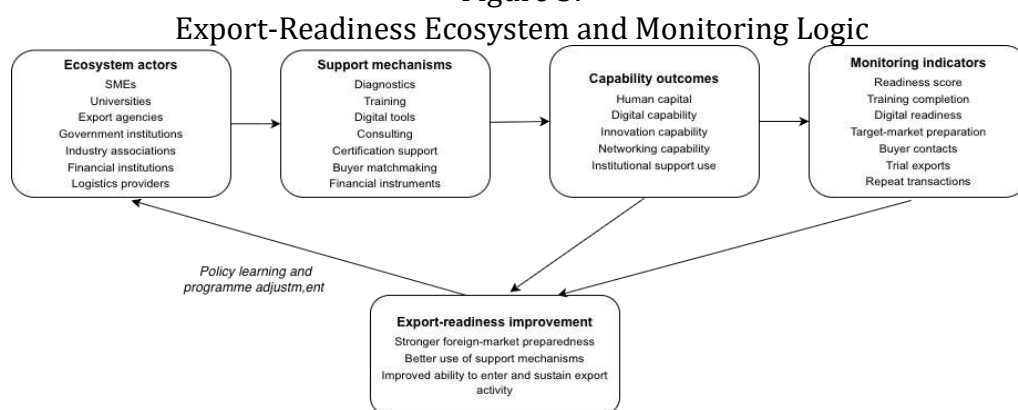
Dimension	Key question	Possible indicators
Human capital capability	Does the firm have personnel prepared for export activity?	Completion of export management training; staff knowledge of export procedures; negotiation skills; foreign-language or intercultural communication capability
Digital capability	Can the firm use digital tools for export development?	Quality of website or export catalogue; digital marketing activity; e-commerce readiness; data use; cybersecurity awareness
Innovation capability	Can the firm adapt products and processes to foreign markets?	Product adaptation; packaging improvement; standards compliance; process improvement; integration of customer feedback
Networking capability	Can the firm access relevant export networks?	Participation in business associations; buyer contacts; cooperation with export agencies; university or consultant engagement; international partner contacts
Use of institutional support mechanisms	Does the firm access and use relevant support mechanisms?	Participation in diagnostics; use of QazTrade or other support programmes; access to export finance or insurance; implementation of an export-readiness roadmap
Export-entry readiness	Is the firm prepared to move from readiness to initial export activity?	Target-market selection; buyer negotiations; signed agreements; trial shipments; logistics plan; compliance with target-market requirements

Source: Authors' synthesis based on SME export-readiness research, SME export-barrier literature, export marketing capability literature, SME digital

transformation literature, and Kazakhstan export-support policy sources (Cavusgil & Zou, 1994; Gerschewski et al., 2020; Leonidou, 2004; Morgan et al., 2012; Narayanan, 2015; OECD, 2021, 2024; Paul et al., 2017; QazTrade, 2026a; QazTrade / Export.gov.kz, n.d.).

The indicators do not constitute a conclusive measurement tool, but they provide a preliminary guide that will help policy-makers, universities, and export authorities assess the status of SMEs in terms of their preparedness for export activity. A measure of export-readiness must include factors pertaining to sustained success after entering the market, which involve repeat export activities, long-lasting customer relationships, improvements to products based on feedback received from abroad, and the continued use of available institutional and online facilities.

Figure 3:



Source: Authors' elaboration based on university-industry collaboration literature, Triple Helix theory, SME digital transformation literature, Kazakhstan university-industry collaboration research, and Kazakhstan export-support policy sources (Ankrah & Al-Tabbaa, 2015; Etzkowitz & Leydesdorff, 2000; Jonbekova et al., 2020; OECD, 2019, 2021, 2024; QazTrade, 2026a; QazTrade / Export.gov.kz, n.d.).

5.4 Theoretical Contribution

Contributions to the literature include reconceptualizing export readiness as a capability that firms build, not just an attribute that firms possess before exporting. This conceptualization draws on concepts from resource-based view, dynamic capability theories, SME internationalization literature, university-industry collaboration, and Triple Helix theories in creating a conceptual framework for export readiness capability.

In addition, this study expands the concept of university-industry collaboration as it considers universities not only as entities in the innovation system and commercialization system but also as players in export readiness ecosystems. Under this context, universities help SMEs engage in international business operations via activities including educational programs, research, executive education, student consulting, digital competence building, and evidence-based policymaking.

The current framework contributes to knowledge development about SMEs in developing economies because it shows that export readiness depends not only on firm competencies but also on the coordination between firms operating at the ecosystem level. This concept is particularly relevant in environments where SMEs are facing several types of constraints.

5.5 Comparative Perspective: Kazakhstan and Indonesia

Even though the model proposed in this research is based on the situation prevailing in Kazakhstan, the same applies to other emerging economies where SMEs play an important role within the local economy but are still involved internationally to a relatively lesser degree. The situation in Indonesia could serve as an example here since the country faces similar problems as Kazakhstan, with the role of SMEs being significant domestically but not internationally.

Table 3:

Comparative Illustration of SME Export-Readiness Challenges: Kazakhstan and Indonesia

Dimension	Kazakhstan	Indonesia
SME contribution to the economy	SMEs accounted for 40.9% of GDP in January–December 2025 (Bureau of National Statistics of the Republic of Kazakhstan, 2026).	MSMEs contribute around 61% of Indonesia's GDP and absorb around 97% of the national workforce (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2022).
Export-readiness gap	SMEs are important domestically, but export diversification requires stronger capabilities in standards, certification, digital adoption, market knowledge, and international networks (OECD, 2024).	MSMEs are numerous and economically significant, but their contribution to national exports remains relatively low, at around 15.7% of total exports (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2025).
University–industry collaboration	University involvement appears to remain an underutilized mechanism for SME export-readiness development. Kazakhstan-specific evidence suggests that university–industry	Indonesia has a large entrepreneurial and digital ecosystem, but many MSMEs may still require stronger managerial, digital, certification, and partnership capabilities to translate this ecosystem into export readiness.

Dimension	Kazakhstan	Indonesia
	partnerships are shaped by policy expectations and institutional constraints, while deeper research and innovation collaboration remains difficult to develop (Jonbekova et al., 2020).	
Digital transformation	Export.gov.kz and the QazTrade Accelerator provide digital and analytical tools, but uneven SME digital literacy may limit the effective use of such tools (QazTrade / Export.gov.kz, n.d.).	Indonesia has a large and fast-growing digital economy supported by e-commerce, fintech, and expanding internet penetration; however, digital participation does not automatically create export readiness unless firms develop digital marketing, logistics, data, and managerial capabilities (International Trade Administration, 2025).
Policy focus	Diversification away from extractive-sector dependence and development of non-resource exports	Scaling MSME competitiveness across a large archipelagic economy through certification, logistics, digitalization, and global-market access.

Source: Authors' compilation based on official statistics, policy documents, Kazakhstan university–industry collaboration research, and institutional sources from Kazakhstan and Indonesia (Bureau of National Statistics of the Republic of Kazakhstan, 2026; Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2022, 2025; International Trade Administration, 2025; Jonbekova et al., 2020; OECD, 2024; QazTrade / Export.gov.kz, n.d.).

The above analysis demonstrates that there are differences between Kazakhstan and Indonesia in terms of economic structure, geography, and priorities, but the gap in export-readiness remains similar. Even if SMEs and MSMEs in both countries may have high numbers and economic significance, they need more capabilities to continue exporting. Export-readiness in both countries is not associated only with the financial aid and promotions; instead, it is linked to the human resource management, digital skills, innovativeness, networking ability, certification support, and institutional help in all aspects.

Therefore, the analysis shows that the developed model is relevant in other cases outside of Kazakhstan. Specifically, in Kazakhstan, the model highlights the importance of combining efforts of export promotion institutions, educational establishments, digital technologies, and industry organizations to foster export capabilities beyond natural resources. Similarly, the same model explains why a strong SME sector and digital transformation cannot provide for export competitiveness when they lack adequate certification, logistics, training, and networking support in Indonesia. Therefore, the capability-based model could be used in the assessment of SME export readiness in emerging markets.

5.6 Policy Recommendations

The proposed model has several policy implications for Kazakhstan and comparable emerging markets.

Table 4:
Policy Recommendations for Strengthening SME Export Readiness

Policy area	Recommended action	Expected capability outcome
University-SME engagement	Establish university-based SME export-readiness clinics that provide diagnostics, market-entry analysis, student consulting, and certification-readiness reviews.	Stronger human capital, market knowledge, and applied problem-solving capability
Digital capability-building	Combine export digital platforms with structured training in e-commerce, digital marketing, cybersecurity, data use, and online buyer communication.	Improved digital readiness and stronger use of digital tools for export development
Certification and standards	Develop joint university-industry support mechanisms for product standards, packaging, safety, quality, environmental requirements, and certification preparation.	Stronger innovation capability and improved product readiness for foreign markets
Networking and international linkages	Expand digital matchmaking, buyer meetings, sector-specific export networks, mentorship schemes, and participation in international trade fairs.	Stronger networking capability and improved access to foreign-market relationships
Monitoring and evaluation	Assess export-support programmes through capability-based indicators rather than only	Better evidence on whether support programmes

Policy area	Recommended action	Expected capability outcome
	participation numbers or transaction counts.	improve SME export readiness
Comparative learning	Promote exchange between Kazakhstan and comparable emerging markets, including Indonesia, on SME digital platforms, university–industry collaboration, and export-readiness diagnostics.	Stronger policy learning and transferable ecosystem-building practices

Source: Authors' policy synthesis based on university–industry collaboration literature, Kazakhstan university–industry collaboration research, SME digital transformation literature, Triple Helix theory, and export-support policy sources (Ankrah & Al-Tabbaa, 2015; Etzkowitz & Leydesdorff, 2000; Jonbekova et al., 2020; OECD, 2019, 2021, 2024; QazTrade, 2026a; QazTrade / Export.gov.kz, n.d.).

Recommendations call for going beyond merely participating in short-term activities when implementing an export strategy and focusing on developing capabilities that can be measured. Universities, export promotion organizations, business associations, and online platforms together can help SMEs in terms of diagnostics, training, certification preparation, use of technology, and international networking.

CONCLUSION

The paper provides a capability-oriented analysis of SME export readiness. Specifically, it argues that SME export readiness should not be understood simply as access to finance, involvement in export promotion activities, or even a plan to conduct exports but as an inherently multidimensional set of capabilities, including human, digital, innovation, network, and institutional support capabilities.

The most important contribution of this paper is the proposed model of how to educate export-ready SMEs via the integration of knowledge generation, technological capacity, and university-business cooperation. According to the model, the key to promoting SME export readiness consists of addressing SME training requirements, engaging universities, providing assistance from the government/export agency sector, employing various digital solutions, using appropriate metrics, and fostering inter-institutional cooperation.

Given the importance of SMEs for the country's GDP and the current focus on export diversification and economic growth driven by the private sector, the above model seems especially relevant to the Kazakhstani context. Ensuring SMEs' export readiness requires the coordination efforts of many institutions, such as universities, governmental agencies, export promotion agencies, business associations, banks, digital companies, and

international players. Referring to Indonesia illustrates that the same strategy may prove effective elsewhere in the emerging market environment, where SMEs contribute greatly to the economy but lack export capability.

However, there are some clear limitations to the study. The research is conceptual in nature and uses literature review, secondary data, and policy analysis rather than qualitative/quantitative interviews/surveys with SMEs, universities, or policymakers. Furthermore, the use of QazTrade data only provides descriptive examples rather than causal evaluation. In the same vein, referring to Indonesia is only intended for illustration purposes and not as empirical research. Hence, one can treat the proposed model as a conceptual framework rather than an empirically confirmed model.

Future research might develop indicators used in the framework and empirically examine the connection between education-based assistance, digital capability, university-industry cooperation, and SME export results. Moreover, comparative studies would enable identifying the most beneficial form of interventions aimed at building SME export capabilities in emerging economies. Further research could also consider whether engagement with export accelerators, university projects, and digital platforms helps to increase SME export readiness and success rates.

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REFERENCES

- Ankrah, S., & Al-Tabbaa, O. (2015). Universities–industry collaboration: A systematic review. *Scandinavian Journal of Management*, 31(3), 387–408. <https://doi.org/10.1016/j.scaman.2015.02.003>
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Bureau of National Statistics of the Republic of Kazakhstan. (2026). *Monitoring of small and medium-sized businesses in the Republic of Kazakhstan as of January 1, 2026*. Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. <https://stat.gov.kz/en/industries/business-statistics/stat-org/publications/482972/>
- Cavusgil, S. T., & Zou, S. (1994). Marketing strategy–performance relationship: An investigation of the empirical link in export market

- ventures. *Journal of Marketing*, 58(1), 1–21.
<https://doi.org/10.1177/002224299405800101>
- Cohen, W. M., Nelson, R. R., & Walsh, J. P. (2002). Links and impacts: The influence of public research on industrial R&D. *Management Science*, 48(1), 1–23. <https://doi.org/10.1287/mnsc.48.1.1.14273>
- Coordinating Ministry for Economic Affairs of the Republic of Indonesia. (2022). *Coordinating Minister Airlangga: Government continues to encourage strengthening economic foundations by establishing digital transformation of MSMEs as one of the priorities*.
<https://ekon.go.id/publikasi/detail/4065/coordinating-minister-airlangga-government-continues-to-encourage-strengthening-economic-foundations-by-establishing-digital-transformation-of-msmes-as-one-of-the-priorities>
- Coordinating Ministry for Economic Affairs of the Republic of Indonesia. (2025). *Pemerintah dorong UMKM naik kelas, tingkatkan kontribusi terhadap ekspor Indonesia*.
<https://www.ekon.go.id/publikasi/detail/6152/pemerintah-dorong-umkm-naik-kelas-tingkatkan-kontribusi-terhadap-ekspor-indonesia>
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21: 1105–1121.
[https://doi.org/10.1002/1097-0266\(200010/11\)21:10/11%3C1105::AID-SMJ133%3E3.0.CO;2-E](https://doi.org/10.1002/1097-0266(200010/11)21:10/11%3C1105::AID-SMJ133%3E3.0.CO;2-E)
- Etzkowitz, H., & Leydesdorff, L. (2000). The dynamics of innovation: From National Systems and “Mode 2” to a Triple Helix of university–industry–government relations. *Research Policy*, 29(2), 109–123.
[https://doi.org/10.1016/S0048-7333\(99\)00055-4](https://doi.org/10.1016/S0048-7333(99)00055-4)
- Export Credit Agency of Kazakhstan. (n.d.). *General information*. Retrieved June 14, 2026, from <https://kazakhexport.kz/en/page/obshchaya-informaciya>
- Gerschewski, S., Rose, E. L., & Scott-Kennel, J. (2020). Ready to export? The role of export readiness for superior export performance of small and medium-sized enterprises. *The World Economy*, 43(5), 1253–1276.
<https://doi.org/10.1111/twec.12928>
- International Trade Administration. (2025). *Indonesia digital economy*. U.S. Department of Commerce. <https://www.trade.gov/country-commercial-guides/indonesia-digital-economy>
- Jaakkola, E. (2020). Designing conceptual articles: Four approaches. *AMS Review*, 10, 18–26. <https://doi.org/10.1007/s13162-020-00161-0>
- Johanson, J., & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of

- outsidership. *Journal of International Business Studies*, 40, 1411–1431. <https://doi.org/10.1057/jibs.2009.24>
- Jonbekova, D., Sparks, J., Hartley, M., & Kuchumova, G. (2020). Development of university–industry partnerships in Kazakhstan: Innovation under constraint. *International Journal of Educational Development*, 79, 102291. <https://doi.org/10.1016/j.ijedudev.2020.102291>
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35, 124–141. <https://doi.org/10.1057/palgrave.jibs.8400071>
- Leonidou, L. C. (2004). An analysis of the barriers hindering small business export development. *Journal of Small Business Management*, 42(3), 279–302. <https://doi.org/10.1111/j.1540-627X.2004.00112.x>
- Ministry of Trade and Integration of the Republic of Kazakhstan. (2022). *QazTrade launches export acceleration and e-commerce programs*. <https://www.gov.kz/memleket/entities/mti/press/news/details/313757?lang=en>
- Morgan, N. A., Katsikeas, C. S., & Vorhies, D. W. (2012). Export marketing strategy implementation, export marketing capabilities, and export venture performance. *Journal of the Academy of Marketing Science*, 40(2), 271–289. <https://doi.org/10.1007/s11747-011-0275-0>
- Narayanan, V. (2015). Export barriers for small and medium-sized enterprises: A literature review based on Leonidou's model. *Entrepreneurial Business and Economics Review*, 3(2), 105–123. <https://doi.org/10.15678/EBER.2015.030208>
- OECD. (2019). *University–industry collaboration: New evidence and policy options*. OECD Publishing. <https://doi.org/10.1787/e9c1e648-en>
- OECD. (2021). *The digital transformation of SMEs*. OECD Publishing. <https://doi.org/10.1787/bdb9256a-en>
- OECD. (2024). *Diversifying Kazakhstan's exports: Institutions, policies, infrastructures*. OECD Publishing. <https://doi.org/10.1787/7f9cd8aa-en>
- Paul, J., Parthasarathy, S., & Gupta, P. (2017). Exporting challenges of SMEs: A review and future research agenda. *Journal of World Business*, 52(3), 327–342. <https://doi.org/10.1016/j.jwb.2017.01.003>
- Perkmann, M., Tartari, V., McKelvey, M., Autio, E., Broström, A., D'Este, P., Fini, R., Geuna, A., Grimaldi, R., Hughes, A., Krabel, S., Kitson, M., Llerena, P., Lissoni, F., Salter, A., & Sobrero, M. (2013). Academic engagement and commercialisation: A review of the literature on university–industry relations. *Research Policy*, 42(2), 423–442. <https://doi.org/10.1016/j.respol.2012.09.007>

- QazTrade. (2022). *A participant in the Export Acceleration Program signed a long-term contract with a major Russian distributor of household chemicals*. QazTrade Trade Policy Development Center. Retrieved June 14, 2026, from <https://qaztrade.org.kz/eng/a-participant-in-the-export-acceleration-program-signed-a-long-term-contract-with-a-major-russian-distributor-of-household-chemicals/>
- QazTrade. (2026a). *QazTrade announces the launch of applications for the 2026 Export Acceleration Program*. QazTrade Trade Policy Development Center. <https://qaztrade.org.kz/eng/qaztrade-announces-the-launch-of-applications-for-the-2026-export-acceleration-program/>
- QazTrade. (2026b). *QazTrade summarized the results of the Export Acceleration Program for 2025*. QazTrade Trade Policy Development Center. <https://qaztrade.org.kz/eng/qaztrade-summarized-the-results-of-the-export-acceleration-program-for-2025/>
- QazTrade / Export.gov.kz. (n.d.). *What is QazTrade Accelerator?* Retrieved June 14, 2026, from <https://export.gov.kz/kazakhstan-export-accelerator?lang=en>
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of sustainable enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7%3C509::AID-SMJ882%3E3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7%3C509::AID-SMJ882%3E3.0.CO;2-Z)
- Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly*, 26(2), xiii–xxiii. <https://www.jstor.org/stable/4132319>
- Whetten, D. A. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, 14(4), 490–495. <https://doi.org/10.5465/amr.1989.4308371>
- World Bank. (n.d.). *Small and medium enterprises finance*. World Bank Group. Retrieved June 14, 2026, from <https://www.worldbank.org/ext/en/topic/competitiveness/small-and-medium-enterprises-smes-finance>
- World Bank. (2026). *Kazakhstan Country Partnership Framework 2026–2031*. World Bank Group. <https://www.worldbank.org/ext/en/country/kazakhstan/cpf>