Eurasian Journal of
ECONOMIC & BUSINESS STUDIES

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Impact of Brand Image and Quality on Purchasing Decision on Foreign Clothing Companies among Working Adults in Kazakhstan

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Abstract

The research has been conducted to study the impact of brand image and Quality on the customer's purchasing behavior of imported brand clothing in Kazakhstan. The study's objectives were to investigate the factors influencing customer behavior, including brand image and Quality. As well as to investigate the influence of consumer behavior on buying decisions. This was a qualitative inquiry by definition. For this research, a random sample of 500 working persons in Astana city was chosen; however, only 408 of them participated and provided their responses as survey respondents. This study's participants were asked to fill out a questionnaire to gather data. Statistical software (SPSS) was used to analyze the data. To validate the hypothesis, the correlation was applied to the results. This study employs multivariate analysis to investigate consumer behavior and purchasing decisions, with the influence of the two predictors (brand image and Quality) weighed against the mixture of the two outcome variables. The correlation and multivariate analysis results indicate that Quality impacts both consumer behavior and purchasing decisions on foreign clothing companies, while the brand image does not deal with the customer's buying decision. Also, it has explored that

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consumer behavior has a positive association with their decision to buy from foreign clothing companies. This study will assist in gaining awareness of existing market tastes in Kazakhstan and how it will assist in estimating the customer's potential needs, desires, and desires, patterns.

Keywords: Brand Image, Quality on Purchasing Decision, Foreign Clothing Companies, Working Adults in Kazakhstan

Introduction

Understanding Consumer behavior strongly impacts marketing policy (Bilgihan et al., 2016). Because of the selling theory, companies work to satisfy the needs of their clients (Baker, 2016). Firms can only meet those requirements if they understand their clients. As a result, advertisement programs must incorporate consumer behavior data into any component of a core marketing strategy (Kumar & Reinartz, 2016). The purchase of goods or services includes several considerations that may affect each decision. People choose brands based on their significance and perceived importance to their identity (Katz et al., 2017). Decision-making is becoming more unpredictable and essential for buyers now than previously. Consumers request knowledge from a few critical outlets internally and externally to maximize their involvement with goods or brands. Consumers have been bombarded with ads, news stories, and direct mailings that contain various information, many of them with mixed messages (Li, 2017). Companies may draw consumers more efficiently when consumer demands and preferences manipulate different essential factors. These variables are brand name, consistency, and price (Erkan & Evans, 2016). This study investigates the effect of brand image and Quality on purchase decisions for international clothing companies among working adults in Kazakhstan.

Businesses should emphasize customer desires over consumer actions in today's dynamic market climate. It is necessary to comprehend what affects consumer behavior among working adults in Kazakhstan. Therefore this study has

investigated brand image, impact on quality influence consumer purchasing behavior and buying decisions.

Even though customer behavior is necessary, Kazakhstan is still understudied because buying decisions are crucial in the apparel industry. It should look at ways to bridge the realistic and intellectual gaps (Forsman and Madsen, 2017). According to Sagatdinova and Quan (2018), taking consumer purchase decisions as a starting point and pursuing a business model that suits domestic apparel product enterprises in Kazakhstan is good. Furthermore, Yang et al. (2017) note that "the lack of academic investigation among working adults in Kazakhstan, especially in the clothing industry, creates a need to do research, which is an obvious gap in academia." Sari and Hanifah (2018) also mentioned, "Despite its rapid development, the fast fashion industry is still considered an under-researched region. Quick fashion experts are hard to come by, both academically and commercially ". The current thesis is an effort in this direction.

Furthermore, there is a substantial difference between market behavior and purchase decisions among working adults in Kazakhstan when buying foreign clothes. With both of these factors in mind, a diver must analyze to save the current unfavorable condition (Seara and Boger, 2019). This research is helpful for companies in the apparel industry who want to learn more about the factors that influence consumer behavior their relationships to buying decisions, and obtain evidence and knowledge to help them run their businesses more successfully. Furthermore, the research can be helpful in customer marketing strategies, and not only business people can use it, but marketers can also take advantage of the observations about consumer behavior and develop theories as an effective marketing tool.

Literature Review

Brand Image

According to Leckie et al. (2016), consumers' reputation is a term consumers believe based on subjective motives and emotions. Brand image refers to a customer's view

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of a particular brand based on a factual or emotional basis (Islam & Rahman, 2016). The fundamental issue is naming it; choosing an excellent name will help (Casado-Daz et al., 2017). A strong brand image can allow the campaign initiative to enjoy and provide outstanding partnerships to the brand that remain continuously in client maintenance (Aschemann-Witzel et al., 2017). The consistency of brand affiliations is dictated by how well brands can withstand data as an essential feature of the brand image (East et al., 2016). Considering the inexorably challenging business competition at the moment, the uniqueness of brand affiliations limited the company to be not the same as making an edge that can have seen as a justification for clients to choose a particular brand (Ebrahim et al., 2016). Brand associations' distinctiveness may deviate from product-related characteristics, practical benefits, or perceived image (Oke et al., 2016). The brand image often refers to the conceptual parts of the picture or perception that incorporates with the imagination of purchasers by the expectations and knowledge of taking the brand over an object or administration; therefore, shaping a good brand image is becoming increasingly essential to be asserted by the company (Bçakcolu, pek, & Bayraktarolu, 2018). The brand picture is often a representation of its bid, which includes the symbolic significance associated with customers by unique characteristics of the goods or services (Lassoued & Hobbs, 2015). A brand image is a customer's view of a brand's positive experience (Burmann et al., 2017). A positive opinion may have been created if the brand has a distinct benefit, a strong reputation, is well-known, trustworthy, and eager to deliver the best service possible (Szmigin & Piacentini, 2018).

Figure 1

The mechanism of inductive reasoning of brand picture

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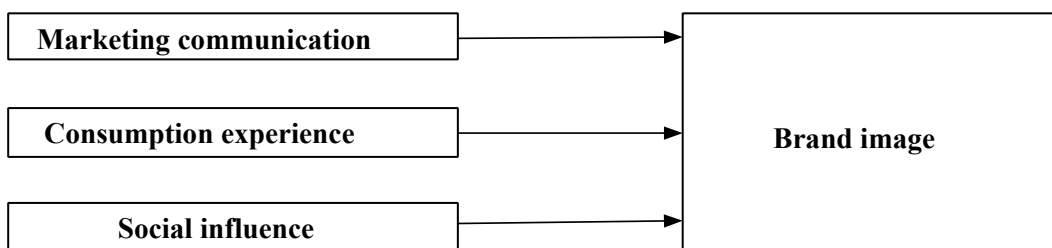
A brand reputation evolves through three distinct inductive processes: marketing contact, consumer perception, and social impact. Marketing communication reflects a brand's voice and how businesses can create relationships with customers around their product offering (Chinomona, 2016). It implies that exhibiting correspondence assists companies (via publicizing) address their clients and cultivating a corporate profile in their clients' minds.

Understanding a consumption experience is a top priority for today's marketers, especially with the emergence of experiential marketing methods that aim to re-enchant people via consumption (Petit, Spence, Velasco, Woods & Cheok, 2017). Management companies, in particular, are being asked to take a broad perspective of what kinds of experiences to plan for customers and how to include them. From an experiential standpoint, customers are less interested in maximizing their benefits and focus more on gluttonous pleasure within a given social environment. In this case, use elicits stimuli and emotions that do far more than only respond to a person's desires since they also resolve the shopper's search for a personality (So et al., 2016).

In general, social influence denotes a person adjusting his or her attitudes or behavior to the attitudes or behavior of others based on their interactions in the social system (Bilgihan et al., 2016). In diffusion research, social influence is also known as 'social contagion,' because the spread of a new product among people is similar to the spread of a virus in a population (Hudson, 2016). Social effect occurs when a potential adopter changes his or her belief, attitude, or behavior toward a new product due to interaction with previous adopters' knowledge, attitudes, or behaviors. According to utility theory, Barger et al. (2016) define social influence as how the behaviors of one's peers shift the utility one hopes to gain from participating in a particular activity and hence the probability that (or degree to which) one would participate in that behavior.

Brand Quality

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According to previous studies, product consistency is one of the crucial positioning resources that directly affects buying decisions (Rana & Paul, 2017) and helps build their competitive advantage and enhance brand equity (Yoshida, 2017).

A commodity is an essential component of a business proposition that provides value to the consumer. Devices are more than just actual objects; they also provide service features, architecture, performance consistency, brand name, and packaging (Gatignon et a;., 2016). Product quality is the most crucial consideration when choosing a brand, particularly in a competitive market with price competition (Kumar & Jha, 2017). However, satisfying the consumers' standards is problematic because their interpretation is varied and contradictory. Value views vary in economic, technological, social, and cultural achievements. Table 1 displays the eight different measurements of product consistency.

Table 1

Garvin's eight dimensions of product quality

Dimensions	Definition
Performance	The product's primary working characteristics
Features	The secondary characteristics of a product that advantage its basic functioning
Reliability	The probability of foilure-free performance over a specified period of time of the product
Conformance	The degree to which a product's physical and output attributes follow design specification.
Durability	the amount of useful product life a customer gets from a product before it determines or ha to be replaced
Serviceability	The easiness, pace, courteousness, and competence of repair
Aesthetics	The way a product looks, feels, sounds, tastes, or smells is a matter of personal preference.
Perceived Quality	Quality dependent on image, brand name, or advertising rather than product attributes and, to course, is subjectively evaluated.

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According to Hussey et al. (2017), Quality is not a one-dimensional concept, and it is common for managers to comprehend Quality in different ways: managers see Quality concerning their very own workplace.

The design of a clothing item will change toward either an assembly-based or a shopper-based point of view. Performance in the Manufacturing-put together technique is dependent on conformance to assembly specifics recommended by managers or object engineers (Creswell and Poth, 2017). A customer-centric approach to consistency is becoming more subjective and difficult to verify (Knight, 2015). As a result, clients and creators (item designers) can define Quality in unpredictable ways, and the setup item may not wholly satisfy the client's quality desires. Supervisors must demonstrate that Quality has a significant impact on the company's primary concern, and optimizing Quality must enable the organization to improve key implementation proportions such as performance, cost reduction, benefit, and share of the pie (Dale and Plunkett, 2017).

Because of the vast number of players entering the Kazakhstani market at national and international levels, competition within the industry is also increasing. According to Sagatdinova and Quan (2018), "clothing firms in Kazakhstan are at a disadvantage due to a lack of awareness from the ground floor, which struggles to define the buying decision." As a result, Zhakupova (2019) claimed that "making local products in the textile industry is very difficult; for example, local firms cover just 10% of the market." As a result, changes in customer behavior affect the market, either directly or indirectly (Pansari & Kumar, 2017). Competition is fierce because of intensified globalization, with both domestic and international brands vying for total market share. It contends that local brands are not as competitive in the industry as international brands. Material exports in the light industry totaled $108.5 million in January-August 2018, a 21% decrease from the previous year, while imports totaled $845 million, a 6.2 percent increase from 2017.

Similarly, it has been unavoidable for companies in Kazakhstan to learn how to sustain and grow their market share in the apparel industry. The retail sector has become more concentrated and disciplined because of the unpredictable arrival of more developed rivals. There is an intense and ferocious rivalry. It has been found

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that existing customers create more sales and income (per customer) than new customers.

Since an increasing percentage of clothing buyers choose composed shopping stores in metropolitan cities, the vast majority of the sorted-out clothing retailers are expanding. As a result, the city is seeing a rise in new suburban and outside players. According to Burnes and Towers (2016), clothing retailers face several difficulties when opening new locations, including venue, store location, forecasting, promoting, and personnel. According to Yeoman et al. (2017), area judgments last over a long period. Choosing an unsuitable store layout can affect the retail outlet's offers and benefits. These solutions have high running costs, making it impossible to recoup the interest if the venue or store placement is incorrect. Essentially, estimating and merchandising options are essential in attracting customers. As the bulk of the apparel meets the design period, merchandising and deciding a price for the assortment is still a task. One of the essential aspects of the brand equity model, according to Lefebvre (2017), is continuity. Customers expect good quality and choice at a low price. However, deciding the right mix of variables to draw and maintain consumers. As a result, there is an urgent need to understand the variables influencing consumer behavior when buying apparel in Kazakhstan. Concurrently, there is a need from an academic standpoint, as there is a lack of knowledge about consumer behavior researchers done in Kazakhstan, especially in the apparel industry and market. According to Baimakhanova (2019), "previous studies neglected many important factors such as brand name, cost, and price, which were not viewed together as independent variables in Kazakhstan's apparel industry."

Research Methodology

A survey of 500 working adults in Astana city was randomly selected for this analysis, but only 408 participated as respondents. The study was methodological. In the current analysis, the researcher gathers data using a questionnaire. The data

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collection team administered the questionnaire to the adults in the research population.

Data Analysis

The data were processed using the SPSS software. The theory was developed and validated using scientific evidence derived from the data following a literature analysis. To validate the hypothesis, the correlation was applied to the results. This study employs multivariate analysis to investigate consumer behavior and purchasing decisions, with the influence of the two predictors (brand image and Quality) weighed against the mixture of the two outcome variables.

The ethical considerations of secrecy, privacy, accountability, respect, and expertise have been guided by data collection. Furthermore, according to ISU (2016), the Institutional Review Board must review all hiring plans and materials before any prospective applicants are invited to engage in any non-exempt research report. As a result, the IRB will review the recruiting plan for this analysis. It is unnecessary, but it helps protect the health and interests of human testing subjects. As a result, the ethical concern would protect participants' anonymity, encourage voluntarism, and reliably notify future participants.

Findings

IBM SPSS was also used to run informative experiments on the data collection containing the underlying testing constructs: brand appearance, consistency, consumer behavior, and purchasing decision. The descriptive statistics help define variables in terms of the overall construct's average ranking and its maximum and minimum ranges and standard deviation.

Table 2
Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Brand Image	408	1.00	5.00	3.2908	0.84436

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Quality	408	1.00	5.00	3.7898	0.77708
Consumer Behaviour	408	1.00	5.00	3.6907	0.91813
Purchase Decision	408	1.00	5.00	3.6789	1.01534
Valid N (listwise)	408				

Table 02 shows that the overall mean of Quality is the best compared to brand image and costs, at 3.78. When shopping for clothes in Kazakhstan, customers place a higher value on Quality. However, any predictor is between 3.00 and 4.00, suggesting that most respondents are either indifferent about the factor's value or accept that it is relevant when shopping for clothing.

Correlation is one of the parametric measures used in this analysis to investigate the associations between the cumulative scores of the latent constructs. Pearson inference is used in this situation, which assists in the partial analysis of theories.

Table 3
Pearson Correlation

		Brand Image	Quality	Price	Consumer Behaviour	Purchase Decision
		Correlations				
Brand Image	Pearson Correlation	1	.770**	.635**	.705**	.539**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000
	N	408	408	408	408	408
Quality	Pearson Correlation	.770**	1	.695**	.792**	.611**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000
	N	408	408	408	408	408
	N	408	408	408	408	408
Consumer Behaviour	Pearson Correlation	.705**	.792**	.743**	1	.710**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000

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		408	408	408	408	408
Purchase Decision	Pearson Correlation	.539**	.611**	.570**	.710**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	408	408	408	408	408

**. Correlation is significant at the 0.01 level (2-tailed).

According to the findings, both brand image and consistency, as determinants, have a strong relationship with consumer behavior at the 0.01 level. The significance level of 0.01 has been presumed in the context of Verma's (2012) statistical analysis, which provides the hypotheses checking threshold. According to this criterion, a partnership is considered significant if its sig-value is less than 0.05 or 0.01 degree of importance (Verma, 2012). Furthermore, in each case, the course of the interaction is positive, and the magnitude is high (strong relationship). It means that good customer activity is correlated with a more substantial brand reputation and higher product recognition. The results propose that H1and H2 are accepted.

Similarly, at the 0.01 level of significance, all variables influencing purchasing behavior (brand name and Quality) strongly correlate with buying decisions. Their respective p-values demonstrate this (sig values). Furthermore, the orientation of the relationship between and set of variables is positive. Finally, the analysis finds a 'strong' significant correlation in each relationship (magnitude) based on the coefficient values. It reflects a more substantial brand reputation and higher product recognition related to good buying decisions. It means that H4 and H5 are also appropriate.

Finally, the association table establishes the relationship between customer activity and international clothing buying decisions. At the 0.01 standard, there is a statistically essential and positive association between the two variables. Furthermore, the association's intensity is essential. It implies that H3, which means a positive relationship between the two variables, is agreed.

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The report employs multivariate regression to study and analyze consumer behavior and purchasing decisions together (as an outcome variable), with the three predictors (brand name, consistency, and price) weighed against the mixture of the two outcome variables.

Table 4

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	0.027	5.690[b]	2.000	403.000	0.004
	Wilks' Lambda	0.973	5.690[b]	2.000	403.000	0.004
	Hotelling's Trace	0.028	5.690[b]	2.000	403.000	0.004
	Roy's Largest Root	0.028	5.690[b]	2.000	403.000	0.004
BI	Pillai's Trace	0.029	6.091[b]	2.000	403.000	0.002
	Wilks' Lambda	0.971	6.091[b]	2.000	403.000	0.002
	Hotelling's Trace	0.030	6.091[b]	2.000	403.000	0.002
	Roy's Largest Root	0.030	6.091[b]	2.000	403.000	0.002
Q	Pillai's Trace	0.186	46.067[b]	2.000	403.000	0.000
Wilks' Lambda		0.814	46.067[b]	2.000	403.000	0.000
Hotelling's Trace		0.229	46.067[b]	2.000	403.000	0.000
Roy's Largest Root		0.229	46.067[b]	2.000	403.000	0.000

a. Design: Intercept + BI + Q

b. Exact statistic

Using Pillai's Trace, the statistic is essential at the 0.05 level, as indicated by Sheffer (2019), suggesting that the impact of brand recognition and consistency associated with international apparel brands on the combination of consumer behavior and purchasing decision is substantial. It backs up the previous findings and models.

As previously reported, the research includes evaluating direct and indirect impacts, considering the effects of brand perception and consistency on consumer behavior and purchasing decisions. While regression analysis can evaluate direct and indirect (mediating) results, structural equation modeling (SEM) is a robust and effective technique for determining structural relationships (Gunzler et al., 2013). This thesis employs PLS-SEM, producing less conflicting findings when detecting mediation effects than regression analysis (Ramli et al., 2018).

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Table 5

PLS-SEM Path Coefficients

Path Coefficients	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Brand Image -> Consumer behavior	0.208	0.212	0.043	4.86	0.000
Brand Image -> Purchase Decision	0.058	0.062	0.054	1.091	0.276
Consumer behaviour -> Purchase Decision	0.671	0.674	0.081	8.235	0.000
Quality -> Consumer behaviour	0.374	0.368	0.05	7.449	0.000
Quality -> Purchase Decision	0.024	0.019	0.068	0.35	0.726

According to the path coefficients derived using the PLS Algorithm, the effects of brand name, price, and consistency on consumer behavior are statistically crucial at the 0.05 stage, as indicated by previous studies (Koch, 2016). Furthermore, the causal impact of consumer behavior on purchasing decisions is essential. Path coefficients of all explanatory variables for purchasing judgment, on the other side, are negligible at the 0.05 mark, as are the regression effects. It means that consumer behavior explains absolute mediation.

The first research goal, which covered H1 and H2, aimed to determine if brand name and consistency are determinants of Kazakhstani working adults' purchasing behavior toward international apparel brands. The H1 and H2 hypotheses were fully adopted using Pearson Correlation, Regression, and SEM analysis, demonstrating that brand perception and product consistency substantially affect the purchasing conduct of working adults in Kazakhstan. As a result, these three variables may be determinants of consumer behavior. In terms of the second study goal, H3, the statistical analyses indicated an optimistic, meaningful, and clear association between consumer behavior and buying decisions. As a result, H3 was acknowledged in the results. Although discussing the third study objective of brand identification and buying decision, the methodological study provided inconsistent findings, as stated earlier in the literature review, and H4 was dismissed. The hypotheses testing is summarised in the table below:

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Table 6

Hypothesis results

Hypotheses	Results
H1: There is a relationship between Brand Image and Consumer Behaviour	Accept
H2: There is a relationship between Quality and Consumer Behaviour	Accept
H3: There is a positive relationship between Consumer Behaviour on Purchasing Decision	Accept
H4: There is a relationship between Brand Image and Purchasing Decision	Not Accepted
H5: There is a relationship between Quality and Purchasing Decision	Accept

Based on these findings, the current study determining consumer behavior could play a mediating role in the relationship between quality and purchase decisions. However, buying choices based on the brand picture is inapplicable to working adults in Kazakhstan shopping for international label garments.

Discussion

Based on the increasing globalization trends, the study summarises the growing complexities of determining consumer preferences and standing out in a competitive market arising with it. For example, the study of Oyevaar et al. (2016); Dawson, Hirt, and Scanlan (2016) discusses globalization's implications, showing that the current trends due to the world being a global village' have allowed international market and cultures to impact local markets and cultures. One of the significant impacts of globalization has been observed on the clothing industry, where subsects like fast fashion and other westernized segments are evolving to influence local markers of Central Asia (Kotler et al., 2015). This is also because westernized divisions, such as quick fashion, allow for supply chain optimization. Globalization patterns allow multinational brands to access low-cost labor in Asia's local markets quickly. However, not just from the standpoint of manufacturers, the entry of global brands into emerging Central Asian markets such as Kazakhstan, Russia, and others exposes shoppers to a plethora of choices ranging from domestic to international apparel brands, in a wide range of prices and Quality (Joseph, 2017).

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The current data set's empirical results suggest that consumer behavior developed by subjective standards of comparison groups and assumed behavior regulation mediates the relationship between buying clothes from global brands and brand perception and Quality. These findings further discuss the research goal of consumer behavior influencing buying decisions, demonstrating a significant and constructive association between the two. According to the writer, a good brand name influences customers to buy from the brand because it promises to satisfy customer needs and offer value for money. These findings also speak to the first and third research goals, aiming to test brand image as a determinant of consumer behavior and an influencer of buying decisions. As a result of the association, the analysis discovers that brand image has a favorable and meaningful relationship with consumer behavior; however, its effect on buying decisions is negligible. When it comes to purchasing clothes from foreign brands, brand value is unimportant to working adults in Kazakhstan. As a result, the findings partly contradict the pre-existing academic findings of Chinomona (2016), illustrating an alternative viewpoint demonstrating that brand image helps attract customers for longer terms lucrative for businesses.

In terms of an individual variable of Quality, the results suggest an essential and robust association between Quality, customer conduct, and purchasing decision; this validates the findings of Swain et al. (2018). The authors affirm that placing a high value on consistency in terms of longevity, dependability, ease of use, and maintenance has a more significant impact on the Quality of buying decisions. As a result, as stated by Noe et al. (2017) and Hussey et al. (2017), a variety of organizations now consider consistency to be a significant element in judging their brand value (2017). I further illustrate that Quality is a significant determinant of consumer behavior and discuss the fourth research goal of Quality affecting buying decisions thoroughly. It is, in particular, valid for Kazakhstani consumers who pursue foreign brand apparel. Consumers put a high emphasis on consistency, and as a result, Quality has a significant effect on their purchasing conduct and, inevitably, buying decisions.

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As a result, the study's conclusions have two consequences. For starters, there are real consequences from advertisers on the ground and politicians looking for ways to boost Kazakhstan's economy and industry. Second, the findings make an essential contribution to the scholarly literature and fill a previously established study vacuum. The findings on Kazakhstani consumer behavior patterns about clothing shopping serve as a basis for potential research in the same area and field. The present thesis serves as a stepping stone. Filling the study void with informative results directly linked to adapting conventional market behavioral models to new patterns is a step forward. As a result, the new thesis assists academics in viewing Kazakhstani market activity through the prism of international apparel labels.

Based on the findings, advertisers suggest that international branded clothing in Kazakhstan employs more robust promotional strategies that emphasize product quality and price variables. It will assist global brands in Kazakhstan gain their target market and multinational firms in retaining their presence in Kazakhstan's domestic market. Consumers' propensity to be swayed by price, for example, can be abused by offering promotional discounts, loyalty passes, or gift cards to consumers, enticing them to buy more from foreign brands. That will also assist in their longevity and disseminating the good word of mouth. In terms of Quality, quick international fashion brands can affect buying decisions by demonstrating the high longevity of their clothing articles. These days, consistency is measured by long-lasting garments. That clothing is manufactured from raw materials that have caused no environmental or social impact, such as the extraction of animal fur for jackets. Consumers aware that their garments are eco conscious or have been upcycled have a comparative edge in terms of consistency that modern-day multinational brands chase. As a result of these marketing campaigns, international brands in Kazakhstan will draw working adults.

Regarding policy ramifications, the current study illustrates that international apparel firms can effectively control Kazakhstan locals by consistency and pricing. As a result, policymakers should inform domestic textile and fashion industries about gaining target buyers by leveraging these elements. It will assist officials in boosting the domestic sector rather than international brands, and it will assist local

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firms in increasing their market share because brand recognition has little effect on buying decisions.

There is still a lack of study in consumer behavior in the garment industry, both academically and in marketing. One of the limitations is the scarcity of research and studies on consumer behavior in the apparel industry, especially on international companies and working adults. Because of the importance of this analysis, the lack of evidence in the current sample can be seen as a drawback. Another drawback is the small number of publicly traded textile production firms, which means that not every firm can disclose the requested research details. Also, most fabric manufacturing companies are based in various parts of Kazakhstan that are far from my location. The price in this context is also an essential factor. So future researches and also include this variable to have a more fantastic look.

Conclusion

Consumer behavior is drastically changing due to the many choices available, which has a different effect on buying decisions (Samiee, 2019). However, several social scientists have called for criticizing this transition as a significant cause of cultural identity loss (Davvetas and Diamantopoulos, 2016). Simultaneously, marketers see it as an incentive to understand what motivates people to choose international or local products and promote their offerings accordingly to achieve a larger market share globally (Sarri and Hanifah, 2018). However, to summarise the issue statement, apparel firms and their advertisers in Kazakhstan struggle to consider and recognize patterns relevant to customer buying decisions in the clothing industry. According to Shayakhmetova (2019), local garment firms in Kazakhstan account for just 10% of the region's clothing industry, while international brands dominate the remainder. As a result of these patterns and a lack of analysis, a systematic study on which variables affect customer purchasing behavior to trigger their purchase decisions against international brands was needed. As a result, the current research sought to investigate the determinants of customer behavior in shopping for clothes from international brands among Kazakhstani working adults.

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The study goal also included determining the degree to which customer behavior affects purchase decisions and the effect of brand appearance, price, and consistency on purchasing decisions.

The study goal of brand image and Quality resulted from previous scientific and theoretical studies in the same domain. A comprehensive analysis of the literature showed that demographic factors such as gender (Pascual-Miguel, Agudo-Peregirna, & Chaparro-Pelaez, 2015), age (Godey et al., 2016), and wealth (Pan, Rasouli, & Timmermans, 2018) have a direct effect on consumer behavior in some sectors, such as wood choice (Laukkanen, 2016). On the other hand, fast food has little effect on gender (Shephard et al., 2016). Furthermore, research has covered the aspects of psychological causes, demonstrating their significant effect on consumer behavior. These dimensions included awareness (Bilgihan et al., 2016); lifestyle (Van Acker, Goodwin, & Witlox, 2016); behavior; values; and needs (Van Acker et al., 2016). (Murphy & Dweck, 2016). From the standpoint of the entire literature, these considerations answer the first research goal, which was to examine the effect on consumer behavior. From the standpoint of the entire literature, these considerations answer the first research goal, which was to examine the effect on consumer behavior. For example, suppose a customer has a higher degree of understanding about a product's competencies and specific characteristics. In that case, it is anticipated that the same consumer would be more likely to purchase that brand when presented with ten other alternatives to the same product (Wang & Hazen, 2016).

Similarly, lifestyle, influenced by differing societal standards, laws, and finances, influences various types of consumption and what goods or brands the customer's lifestyle suits and attaches appeal to (Kuster-Boluda & Vidal-Capilla, 2017); hence, affecting consumer behavior. The customer's attitude toward a particular product or brand is created by introducing the consumer to advertising or encounter. These social cues form customer opinions, which in turn influence how they act (either positively or negatively) toward a company or its merchandise (Rana & Paul, 2017; Lu et al.,2016). Harun et al. (2018) clarified the six value systems and demonstrated their effect on consumer behavior in terms of beliefs or belief systems. Economic,

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Aesthetic, Social, Political, and Religious were some of the titles. Finally, as a determinant of consumer behavior, desires are the primary motivator for individuals to recognize and fill the opportunity void (Murphy & Dweck, 2016).

The literature provided by Ebrahim et al. (2016), Oke et al. (2016), and Bruwer et al. (2016) also form the study focus prompting a connection between brand perception and purchasing decision. As a result, the brand image refers to a brand's imprint on a consumer's cognitive memory. The opinion will be positive if the company has a distinct edge, a firm name, is well-known, trustworthy, and well-known for the consistency of its customer service (Szmigin & Paicentini, 2018) if these variables are not present, vice versa. Thus, the brand picture in the minds of consumers can be shaped by marketing engagement strategies, user experience, and socially affecting customers or sharing a good word of mouth. According to Chinamona (2016), brand image will affect customer buying decisions in this way. The same is true for consistency and costs. Previous research has shown that presenting high-quality products and services to quality-conscious customers will improve their buying decisions (Yoshida, 2017).

As a result, the better the content, the more likely it is that quality-conscious customers would pay more for the commodity. As a result, the availability of given commodity influences buying decisions and consumer behavior (Gao et al., 2016). Based on these results, the current study hypothesized that brand name, efficiency, and price significantly impact purchasing decisions through consumer behavior.

Limitations and Suggestions for Future Research

However, there are some limitations to this study since the sample size was limited to Almaty and Astana, Kazakhstan's two largest cities. Because of the Covid-19 epidemic's restrictions, the researcher could not perform a comparative study in other locations. Furthermore, the researcher could only collect data for 1.5 months owing to time and funding constraints. Expand your reach and focus on Kazakhstan's more prominent regions to compensate for these limitations. In this way, the data would be more generalizable and could be used in various research

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contexts. A wide range of social elements influence customer behavior and purchasing decisions in today's culture. Because of this, future studies must take into account these characteristics as well as those associated with particular products and brands.

References

1. Aschemann-Witzel, J., Jensen, J. H., Jensen, M. H., & Kulikovskaja, V. (2017). Consumer behavior towards price-reduced suboptimal foods in the supermarket and related to food waste in households. Appetite, 116, 246-258.

2. Baimakhanova S., (2019), The main factors influencing consumer behavior towards Bershka store in Kazakhstan, International Journal of Engineering and Management Research, Vol.9

3. Baker, M. J. (2016). What is marketing?. In The Marketing Book (pp. 25-42). Routledge.

4. Bıçakcıoğlu, N., İpek, İ., & Bayraktaroğlu, G. (2018). Antecedents and outcomes of brand love: the mediating role of brand loyalty. Journal of Marketing Communications, 24(8), 863- 877

5. Bilgihan, A., Barreda, A., Okumus, F., & Nusair, K. (2016). Consumer perception of knowledge-sharing in travel-related online social networks. Tourism Management, 52, 287- 296

6. Bruwer, J., Chrysochou, P., & Lesschaeve, I. (2017). Consumer involvement and knowledge influence wine choice cue utilization. British Food Journal, 119(4), 830-844.

7. Burmann, C., Riley, N. M., Halaszovich, T., & Schade, M. (2017). Identity-Based Brand Controlling. In Identity-Based Brand Management (pp. 233-280). Springer Gabler, Wiesbaden.

8. Burnes, B., & Towers, N. (2016). Consumers, clothing retailers, and production planning and control in the smart city. Production Planning & Control, 27(6), 490-499

Impact of Brand Image and Quality on Purchasing Decision
on Foreign Clothing Companies among Working Adults in Kazakhstan
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9. Chinomona, R. (2016). Brand communication, brand image, and brand trust as antecedents of brand loyalty in Gauteng Province of South Africa. African Journal of Economic and Management Studies, 7(1), 124-139

10. Creswell, J. W., & Poth, C. N. (2017). Qualitative inquiry and research design: Choosing among five approaches. Sage publications.

11. Dale, B. G., & Plunkett, J. J. (2017). Quality costing. Routledge.

12. Davvetas, V., & Diamantopoulos, A. (2016). A schema theory perspective is how product category shapes preferences toward global and local brands. Journal of international marketing, 24(4), 61-81.

13. Dodds, W. B. (2015). The exchange value concept in marketing. Proceedings of the 1993 Academy of Marketing Science (AMS) Annual Conference (pp. 459-463). Springer, Cham.

14. East, R., Singh, J., Wright, M., & Vanhuele, M. (2016). Consumer behavior: Applications in marketing. Sage.

15. Ebrahim, R., Ghoneim, A., Irani, Z., & Fan, Y. (2016). A brand preference and repurchase intention model: the role of consumer experience. Journal of Marketing Management, 32(13- 14), 1230-1259.

16. Erkan, I., & Evans, C. (2016). The influence of eWOM in social media on consumers' purchase intentions: A comprehensive approach to information adoption. Computers in Human Behavior, 61, 47-55.

17. Forsman and Madsen, (2017), "Consumers' Attitudes towards Sustainability and Sustainable Labels in the Fashion Industry: A Qualitative Study," http://www.diva portal.org/smash/record.jsf?pid=diva2%3A1143596&dswid=-538

18. Gao, J., Han, H., Hou, L., & Wang, H. (2016). Pricing and effort decisions in a closed-loop supply chain under different channel power structures. Journal of Cleaner Production, 112, 2043-2057.

19. Gatignon, H., Gotteland, D., & Haon, C. (2016). Concept Development. In Making Innovation Last: Volume 2 (pp. 175-208). Palgrave Macmillan, London.

20. Godey, B., Manthiou, A., Pederzoli, D., Rokka, J., Aiello, G., Donvito, R., & Singh, R. (2016). Social media marketing efforts of luxury brands: Influence on

Impact of Brand Image and Quality on Purchasing Decision
on Foreign Clothing Companies among Working Adults in Kazakhstan
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brand equity and consumer behavior. Journal of business research, 69(12), 5833-5841.

21. Gunzler, D., Chen, T., Wu, P., & Zhang, H. (2013). Introduction to mediation analysis with structural equation modeling. Shanghai archives of psychiatry, 25(6), 390.

22. Harun, A., Rokonuzzaman, M., Prybutok, G., & Prybutok, V. R. (2018). How to influence consumer mindset: A perspective from service recovery. Journal of Retailing and Consumer Services, 42, 65-77.

23. Hudson, S., Huang, L., Roth, M. S., & Madden, T. J. (2016). The influence of social media interactions on consumer-brand relationships: A three-country study of brand perceptions and marketing behaviors. International Journal of Research in Marketing, 33(1), 27-41.

24. Hussey, P. S., Friedberg, M. W., Anhang Price, R., Lovejoy, S. L., & Damberg, C. L. (2017). Episode-based approaches to measuring health care quality. Medical Care Research and Review, 74(2), 127-147.

25. Iowa State University (2016), "Recruitment of Research Participants," online source, https://www.compliance.iastate.edu/sites/default/files/imported/irb/guide/docs/Recruitment% 20of%20Research%20Participants.pdf

26. Islam, J. U., & Rahman, Z. (2016). Examining the effects of brand love and brand image on customer engagement: An empirical study of fashion apparel brands. Journal of Global Fashion Marketing, 7(1), 45-59.

27. Katz, E., Lazarsfeld, P. F., & Roper, E. (2017). Personal influence: The part played by people in the flow of mass communications. Routledge.

28. Knight, J. (2015). Updated definition of internationalization. International higher education, (33).

29. Kock, N. (2016). Hypothesis testing with confidence intervals and P values in PLS-SEM. International Journal of e-Collaboration (IJeC), 12(3), 1-6.

30. Kotler, P., Burton, S., Deans, K., Brown, L., & Armstrong, G. (2015). Marketing. Pearson Higher Education AU.

Impact of Brand Image and Quality on Purchasing Decision
on Foreign Clothing Companies among Working Adults in Kazakhstan
Alisher Mamedov

31. Kumar, N., & Jha, A. (2017). Temperature excursion management: a novel quality system approach in the pharmaceutical industry. Saudi Pharmaceutical Journal, 25(2), 176-183.

32. Kumar, V., & Reinartz, W. (2016). Creating enduring customer value. Journal of Marketing, 80(6), 36-68

33. Küster-Boluda, I., & Vidal-Capilla, I. (2017). Consumer attitudes in the election of functional foods. Spanish Journal of Marketing-ESIC, 21, 65-79.

34. Ladhari, R., & Tchetgna, N. M. (2015). The influence of personal values on Fair Trade consumption. Journal of Cleaner Production, 87, 469-477.

35. Lassoued, R., & Hobbs, J. E. (2015). Consumer confidence in credence attributes: The role of brand trust. Food Policy, 52, 99-107

36. Laukkanen, T. (2016). Consumer adoption versus rejection decisions in seemingly similar service innovations: The case of the Internet and mobile banking. Journal of Business Research, 69(7), 2432-2439.

37. Leckie, C., Nyadzayo, M. W., & Johnson, L. W. (2016). Antecedents of consumer brand engagement and brand loyalty. Journal of Marketing Management, 32(5-6), 558-578.

38. Lefebvre, H. (2017). Everyday life in the modern world. Routledge

39. Li, C. Y. (2017). Why do online consumers experience information overload? An extension of communication theory. Journal of Information Science, 43(6), 835-851.

40. Lu, A. C. C., Gursoy, D., & Del Chiappa, G. (2016). The influence of materialism on ecotourism attitudes and behaviors. Journal of Travel Research, 55(2), 176-189.

41. Murphy, M. C., & Dweck, C. S. (2016). Mindsets shape consumer behavior. Journal of Consumer Psychology, 26(1), 127-136.

42. Murphy, M. C., & Dweck, C. S. (2016). Mindsets shape consumer behavior. Journal of Consumer Psychology, 26(1), 127-136.

43. Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2017). Human resource management: Gaining a competitive advantage. New York, NY: McGraw-Hill Education.

Impact of Brand Image and Quality on Purchasing Decision
on Foreign Clothing Companies among Working Adults in Kazakhstan
Alisher Mamedov

44. Oke, A. O., Kamolshotiros, P., Popoola, O. Y., Ajagbe, A. M., & Olujobi, J. O. (2016). Consumer behavior towards decision making and loyalty to particular brands. International Review of Management and Marketing, 6, 43-52.

45. Oke, A. O., Kamolshotiros, P., Popoola, O. Y., Ajagbe, A. M., & Olujobi, J. O. (2016). Consumer behavior towards decision making and loyalty to particular brands. International Review of Management and Marketing, 6, 43-52.

46. Pan, X., Rasouli, S., & Timmermans, H. J. (2018). Effect of social influence on consumer choice behavior using a sequential stated choice experiment: a study of city trip itinerary choice. In 97th Transportation Research Board Annual Meeting. Transportation Research Board.

47. Pansari, A., & Kumar, V. (2017). Customer engagement: the construct, antecedents, and consequences. Journal of the Academy of Marketing Science, 45(3), 294-311.

48. Pascual-Miguel, F. J., Agudo-Peregrina, Á. F., & Chaparro-Peláez, J. (2015). Influences of gender and product type on online purchasing. Journal of Business Research, 68(7), 15501556.

49. Peltier J & Schultz E, (2016), Social media and consumer engagement: a review and research agenda, Journal of Research in Interactive Marketing, Volume 10 Issue 4

50. Petit, O., Spence, C., Velasco, C., Woods, A. T., & Cheok, A. D. (2017). Changing the influence of portion size on consumer behavior via imagined consumption. Journal of Business Research, 75, 240-248.

51. Ramli, N. A., Latan, H., & Nartea, G. V. (2018). Why should PLS-SEM be used rather than regression? Evidence from the capital structure perspective. In Partial least squares structural equation modeling (pp. 171-209). Springer, Cham.

52. Rana, J., & Paul, J. (2017). Consumer behavior and purchase intention for organic food: A review and research agenda. Journal of Retailing and Consumer Services, 38, 157-165.

53. Rana, J., & Paul, J. (2017). Consumer behavior and purchase intention for organic food: A review and research agenda. Journal of Retailing and Consumer Services, 38, 157-165.

Impact of Brand Image and Quality on Purchasing Decision
on Foreign Clothing Companies among Working Adults in Kazakhstan
Alisher Mamedov

54. Rosenbaum-Elliott, R., Percy, L., & Pervan, S. (2015). Strategic brand management. Oxford University Press, USA.

55. Sagatdinova and Quan, (2018), "Research and Analysis on the Influencing Factors of the Purchase Decision of the Consumers of Fast Fashion Goods in Kazakhstan," International Journal of Business and Management, Vol. 13

56. Samiee, S. (2019). Reflections on global brands, global consumer culture, and globalization. International Marketing Review.

57. Sari and Hanifah, (2018), "Factors Affecting Consumers Behavior of Coventry University Students Towards Fast-Fashion Industry," https://www.atlantis press.com/proceedings/piceeba-18/25902689

58. Sari and Hanifah, (2018), "Factors Affecting Consumers Behavior of Coventry University Students Towards Fast-Fashion Industry," https://www.atlantispress.com/proceedings/piceeba-18/25902689

59. Seara and Boger, (2019), "Pulse of the fashion industry," http://media publications.bcg.com/

60. Sheffer, I.M. Note on Appell polynomials. *Bull. Am. Math. Soc.* 1945, *51*, 739–744.

61. Shephard, A., Pookulangara, S., Kinley, T. R., & Josiam, B. M. (2016). Media influence, fashion, and shopping: a gender perspective. Journal of Fashion Marketing and Management, 20(1), 4-18.

62. Swain, S., Padhy, R., Jena, B. R., & Babu, S. M. (2018). Quality By Design: Concept To Applications. Current drug discovery technologies.

63. Szmigin, I., & Piacentini, M. (2018). Consumer behavior. Oxford University Press

64. Szmigin, I., & Piacentini, M. (2018). Consumer behavior. Oxford University Press.

65. Van Acker, V., Goodwin, P., & Witlox, F. (2016). Key research themes on travel behavior, lifestyle, and sustainable urban mobility. International journal of sustainable transportation, 10(1), 25-32.

66. Verma, J. P. (2012). Data analysis in management with SPSS software. Springer Science & Business Media.

Impact of Brand Image and Quality on Purchasing Decision
on Foreign Clothing Companies among Working Adults in Kazakhstan
Alisher Mamedov

67. Wang, Y., & Hazen, B. T. (2016). Consumer product knowledge and intention to purchase remanufactured products. International Journal of Production Economics, 181, 460-469.

68. Yoshida, M. (2017). Consumer experience quality: A review and extension of the sport management literature. Sport Management Review, 20(5), 427-442

69. Yoshida, M. (2017). Consumer experience quality: A review and extension of the sport management literature. Sport Management Review, 20(5), 427-442.

70. Shayakhmetova Z. (2019) "Kazakh light industries focus on the local market, fact shortage of high-quality raw materials," The Astana Times: Bringing Kazakhstan to the world, https://astanatimes.com/2019/03/kazakh-light-industries-focus-on-local-market-faceshortage-of-high-quality-raw-materials/.

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HRM Comparative Performance and Practices within MNCs' subsidiaries in Kazakhstan

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Abstract

The issue of human resource management (HRM) is critical to economic growth, particularly in the countries like the Commonwealth of Independent States (CIS) and in the transition economies of Central and Eastern Europe (CEE). The growing number of multinational corporations (MNCs) as one of the main drivers of the internationalization process in the HRM sector has attracted considerable attention from management scholars worldwide. The aim of this report is to discuss and analyse HRM performance and HRM practices in subsidiaries of MNCs in Kazakhstan, as the largest recipient of foreign direct investment (FDI) among CIS countries. The methodological approach of this study is based on the analysis of Poór et al. (2017) work on HRM performance and practices combined by cross-cultural management (CCM) of HRM from Hofstede study (Hofstede et al., 2010). It found that the subsidiaries of the MNCs in Kazakhstan tend to adopt the divergence of HRM functions and practices instead of the convergence concept by giving more freedom to the local HR departments in managing their HR roles and strategies. The implication practices of the study may help HR practitioners in both private sectors and public government administrations to understand about the importance of HRM policies and practices characteristics and behaviours amongst the MNCs subsidiaries a country, in achieving and improving labor productivity and business efficiency.

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Keywords: human resource management (HRM), multinational corporations (MNCs), Commonwealth of Independent States (CIS), Central and Eastern European (CEE), HRM performance and practices, foreign direct investment FDI, Hofstede study, Cross-Cultural Management (CCM)

Introduction

Undoubtedly, today's globalisation and the growing number of multinational corporations (MNCs) are the main drivers of the internationalisation process in all sectors; the field of human resource management (HRM) is no exception and enjoys a great deal of attention from management scholars around the globe (De Cieri, 2017; Edwards & Rees, 2017). As Susanto et al. (2019) assert, this globalisation of business issues has led to an increasing recognition of the well-managed workforce and the evolution of the role of HR in fulfilling strategic importance. According to Stor & Haromszeki, (2019) and Wacker, (2013), foreign direct investment (FDI) is often used as an indicator of the increasing activities of MNCs in a country where the number of MNC employees working abroad exceeds the number of employees working in the mother country (Poór, 2013). In addition, Poór et al., (2017) claims that FDI is not only a crucial factor for economic development, but also for job creation in a country, especially in transition economies in Central and Eastern Europe (CEE).

However, Dowling et al., (2013) and Susanto et al. (2019) point out, that in nourishing this increase in international business, the role of human resource management should be considered as a key issue across the business units as HRM policies and practices play a crucial role in the competitiveness and sustainability of the business. This is supported by Azam & Ahmed (2015) and Mohanty & Sethi (2019) who affirm that human capital development is critical to economic growth, especially in the countries of the Commonwealth of Independent States (CIS).

The purpose of this report is to discuss and analyse the performance and practises of human resource management in subsidiaries of multinational companies in Kazakhstan. Kazakhstan was chosen because it is the largest landlocked developing

country, which according to UNCTAD, (2014, 2019) received huge foreign direct investment of USD 3.8 billion in 2018, the largest share among other countries in this region. Recently, Astana International Exchange (AIC) was established under the principles of English common law - the first stock exchange in the region CEE/CIS - to attract more FDI and promote investment in Kazakhstan (Dettoni, 2019).

This paper is divided into the following sections. First, literature review on HRM theory and concepts are summarised, including the description of the country's cultural context, comparative aspects of HRM, and internationalisation of HRM (Brewster et al., 2016; De Cieri, 2017; Dowling et al., 2013; Edwards & Rees, 2017). The next section describes the methodology of this study. Followed by finding and discussions sections of Kazakhstan country profile, including a socio-economic overview, FDI performance, and the country's dimension of national culture (Hofstede et al., 2010; Hofstede Insights, 2022). Also is described the international HRM performance and HRM practises in the subsidiaries of the Kazakh MNCs, including the characteristics of HRM activities and operations in the companies based on the work of Poór et al., (2017). The final section concludes with a summary of the report.

Literature Review

HRM – theory and concepts

According to Stone et al. (2020), HRM refers to the activities within the organisation that include HR planning, staffing (recruitment, selection, and placement), performance management, training and development, compensation, and labour relations. In addition, they specified the broad concept of international human resource management (IHRM), which encompasses the same activities as general HRM but includes employees across national borders and deals with a multicultural workforce and different policies as well as regulations, such as expatriate administrative services, international taxation and orientation, host government relations, and language translation services.

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Owing to Brewster et al., (2016), the understanding of IHRM should be based on the study of multinational corporations (MNCs), which can be defined as ".... a company that operates in multiple countries but is managed from a home country". Therefore, as Edwards & Rees (2017) argue, IHRM should focus on the ways in which MNCs seek to influence the way people work across borders in their operations. Furthermore, they stated that due to the nature of IHRM, which always takes place in the context of dynamic, significant change across nations and regions, international human resource strategies and practices (HR) are best understood when situated within the underlying social, political and economic trends within a nation. To learn more about IHRM, Brewster et al. (2016) and Dowling et al. (2013) suggest three important aspects of IHRM: cross-cultural management of HRM, comparison of HRM practices, and internationalisation of HRM.

Cross-Cultural Management (CCM) of HRM and the National Culture Dimensions

According to Hofstede (2015), culture is defined "... a system of shared, usually unconscious and unwritten values, rules, norms, and institutions that are socially transmitted and regulate the social life of groups." In addition, culture can be analysed using a country, language, religion, value, ethics, and/or many other areas as a frame of reference and can be viewed as collective programming of the mind that distinguishes members of one group or category of people from others (Hofstede et al., 2010). The underlying assumption of the study CCM is that there are differences between management practises in different countries and that the particular environment plays a role in the study of human behaviour in different nations. Since IHRM involves the interaction and movement of people across national boundaries, appreciation and understanding of cultural differences are important and essential (Dowling et al., 2013), especially when managing expatriates (De Cieri, 2017).

The studies of CCM aim to describe and compare work behaviours in different cultures from different nations. For this paper, Hofstede's national cultural dimension is used (Hofstede et al., 2010; Hofstede Insights, 2022). In the latest version of the book, Hofstede et al. (2010) added another cultural dimension

become six dimensions of culture which is known as 6-D Model. So, the 6-D model of national culture are now available: Power Distance Index (PDI), Individualism versus Collectivism (IDV), Masculinity versus Femininity (MAS), Uncertainty Avoidance Index (UAI), Long-Term Orientation versus Short-Term Orientation (LTO), and Indulgence versus Restraint (IVR). The PDI expresses the degree to which the less powerful members of a society accept and expect that power is unequally distributed. The fundamental question here is how a society deals with inequalities among people. Then, the IDV can be defined as a preference for a loose social structure in which individuals are expected to care only for themselves and their immediate family members. Next, the MAS represents a social preference for achievement, heroism, assertiveness, and material rewards for success. The UAI expresses the extent to which members of a society are uncomfortable with uncertainty and ambiguity. The fundamental question here is how a society deals with the fact that the future can never be known: Should we try to control the future or just let it happen? The LTO describes how each society must maintain some connection to its own past as it grapples with the challenges of the present and the future, with societies prioritising these two existential goals differently. The IVR is defined as the extent to which people attempt to control their desires and impulses based on the way they were raised. Relatively weak control is referred to as "indulgence" and relatively strong control is referred to as "restraint."

As De Cieri, (2017) and Kozhakhmetova et al. (2019) assert, by understanding the cultural background of different countries in the context of IHRM, the organisation can better manage the employees in the subsidiaries who are from different countries.

Comparatives of HRM Practices

HRM practices and functions can be defined as a set of practices used by organizations to manage human resources by fostering the development of organization-specific competencies, establishing complex social relationships, and generating organizational knowledge to maintain competitive advantage (Manzoor et al., 2019; Minbaeva, 2005; Renkema et al., 2020). Today's HRM practices may

consist of common work organization and policies, including HRM planning, recruitment (hiring and selection), performance management, performance appraisal, training and career development, compensation and labour relations, flexible work practices (Brewster et al., 2016; Dowling et al., 2013; Minbaeva, 2005; Tan & Nasurdin, 2011).

Meanwhile, comparative HRM practices take into account the different cultural differences of various employees in organizations. As De Cieri, (2017) points out, comparative HRM practices occur when organizations operate and manage across countries. They should take into account the various local factors including culture and social practices, political situation, legislation, economy, technology, and labor market, which explicitly studied HRM practices in the application of each nation, and combine them with the rules of international organizations to develop policies and practices in subsidiaries that take into account the HRM practices already in place. In other words, comparative HRM should consider both home country and host country implications in implementing HR policies and practices in the subsidiaries of such MNCs (Edwards et al., 2019). At least six themes have consistently emerged in comparative HRM practices in the context of globalization, including convergent and divergent practices, technology absorption, working conditions and labor law, and corporate policy and strategy (De Cieri, 2017). To conduct comparative HRM practices in subsidiaries of multinational companies in Kazakhstan, Poór et al., (2017) used four key HRM indicators, namely the number of employees HR, labor cost ratio, share of annual training budget, and expatriate/in patriate turnover.

Internationalising HRM

According to Dowling et al., (2013), the main focus of internationalisation of HRM is on the multinational context of HRM practises and policies. Therefore, in this environment, organisations should put more efforts on managing multicultural native workforce, building global teams, managing diversity, developing a global team, and building universal awareness (De Cieri, 2017). In addition, they identified

the top four issues that play a role in these situations, including implementing strategic direction, dealing with managing diversity, developing a global team, and establishing global integration.

Methodology

The methodology of the study is based on the survey data and information from the work of Poór et al. (2017) on HRM performance and practices in subsidiaries of Kazakh MNCs. In addition, to provide a robust and meaningful analysis of international HRM theories and practices, Hofstede's national culture dimensions of CCM are applied to HRM comparing the six dimensions of national culture from the MNCs and their subsidiaries, as well as most FDI countries (Hofstede et al., 2010).

In the first stage of the methodological approach, Kazakhstan's macroeconomic environment is examined through an analysis of the country's GDP structures (both by industry and employment shares), as well as through an analysis of registered foreign-owned enterprises and the proportion of their employees. Kazakhstan's national cultural profile was also described and analysed by applying Hofstede's 6-D model and conducting a cultural compass comparison among Kazakhstan's country business partners (Hofstede Insights, 2022). In the second phase, the characteristics of MNCs and their subsidiaries, investment objectives, and their competitive factors are analysed. In the last phase, the HRM practises of the MNCs and subsidiaries are analysed, focusing on employee roles and functions, employee turnover, and employee competencies.

Findings and Discussions

Kazakhstan Socio-economics Overview

As the largest landlocked developing country in the world, Kazakhstan has made impressive progress since its independence in the early 1990s. Measured by GDP (PPP per capita), which reaches about 27 thousand USD, Kazakhstan can be classified as an upper middle-income country (World Bank, 2021). Driven by

foreign direct investment (FDI), Kazakhstan's GDP has grown 9-fold since 2000, making Kazakhstan the largest economy in Central Asia and earning it an investment-grade rating from international rating agencies (Dettoni, 2019). The country strives to maintain its thriving socioeconomic growth in the future with a compound annual growth rate (CAGR) of GDP of about 1.2% between 2010 and 2020, to $164.8 billion in 2020, and a continued stable macroeconomic situation with manageable inflation and unemployment rates, as well as a significantly higher ranking in global indicators (World Bank, 2021; Schwab, 2019). Table 1 summarises Kazakhstan's socioeconomic performance in 2020, which is derived from the main indices measuring global performance.

Table 1. Kazakhstan – Socio-economics Statistics Performance (2020)

Socio-economics and measurement items	Unit	2010	2020	CAGR (2010-2020)
Population	Million	16.3	18.4	1.34%
GDP	US$ Billion	148.0	164.8	1.20%
GDP per capita	(PPP in US$)	19,225.1	26,754.4	3.74%
Unemployment rates	Per cent	5.8%	4.9%	-1.86%
Inflation rates	Per cent	7.1%	6.8%	-0.53%
Global Competitiveness Index (2019)	rank of (total world countries)		55 (140)	
Doing Business Index (2019)	rank of (total world countries)		25 (190)	
Human Development Index (2019)	rank of (total world countries)		51 (189)	

Sources: World Bank (2021), World Economic Forum, UNDP, Ministry of National Economy Kazakhstan; Schwab (2019)

Table 2 describes the GDP structures of Kazakhstan in 2021, which is still mainly dominated by mining/extractive industries (14%), slightly less than the largest contributor, namely wholesale and retail trade (17%), followed by manufacturing (13%) sectors. Interestingly, despite its large share of GDP, the mining sector absorbed only 2% of jobs. The largest contributor to employment after the wholesale and retail trade sector (16%) was agriculture and fishing (13%), followed by education (9%) (Bureau of National Statistics, 2022). It explains that the employment structure profile of Kazakhstan is still led by the oldest, conventional sectors. In terms of GDP per employed person, extractive industries contributed the highest share (60 thousand KZT), followed by real estate (33 thousand KZT) and finance and insurance (about 13 thousand KZT), while employment in the education sector accounted for the smallest shares, about two thousand KZT.

Table 2. Kazakhstan GDP Structure and Employment (2021)

Industry Sectors	GDP by Industry		Employment by Industry		GDP per employed person
	KZT Billion	%	000 people	%	KZT 000
Agriculture, forestry ang fishing	4,145	5.1%	1,175	13.3%	3,527
Mining and quarrying	11,459	14.1%	191	2.2%	60,026
Manufacturing	10,809	13.3%	1,089	12.4%	9,924
Construction	4,714	5.8%	631	7.2%	7,471
Wholesale and retail trade	14,385	17.7%	1,421	16.1%	10,121
Transportation and storage	5,282	6.5%	618	7.0%	8,555
Information and communication	1,950	2.4%	160	1.8%	12,213
Financial and insurance activities	2,438	3.0%	189	2.1%	12,900
Real estate activities	5,282	6.5%	158	1.8%	33,349
Professionals	2,844	3.5%	255	2.9%	11,168
Education	2,763	3.4%	1,110	12.6%	2,490
Healthcares & Social works	2,032	2.5%	512	5.8%	3,965
Other sectors	13,166	16.2%	1,303	15.0%	10,102
Total	81,269	100.0%	8,812	100.0%	9,223

Source: Bureau of National statistics, 2022.

Based on the latest record from the National Bank of Kazakhstan (2022), FDI by the country of origin show that most foreign investors in Kazakhstan come from traditional European countries and former allies of Kazakhstan, such as the Netherlands, which contributes about 37% of total FDI, followed by the USA (24%), France (8%) and Russia (4%) (Figure 1). Other Asian investors such as China and Japan contribute about 6% of total FDI. These share patterns are quite similar compared to 2005 data, where most FDI came from the Netherlands (25%), the USA (15%), and France (10%).
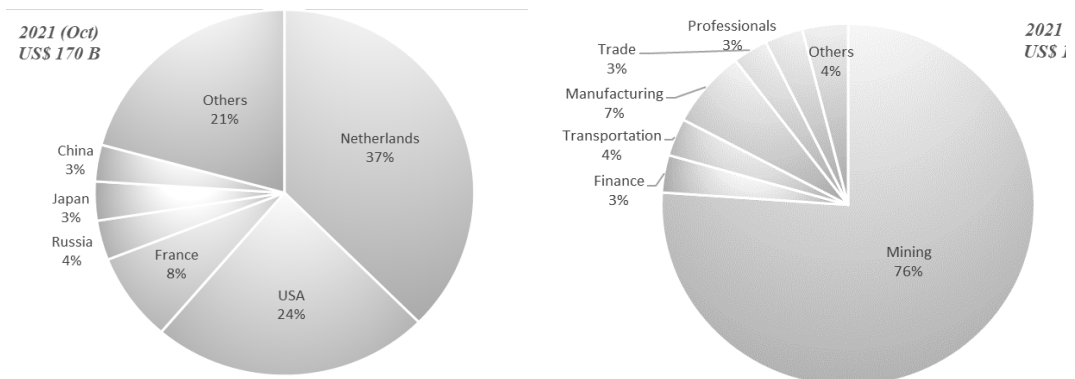
Source: National Bank of Kazakhstan (2022)

Figure 1. FDI by Country of Origin (Left) and by Industry Sectors (Right)

In terms of FDI by the economic activities, mining sector has still dominated which accounted about three fourth of the total investment, followed by manufacturing (7%), transportation (4%), trade, finance, and professionals that equally contribute by tree percent. It can be concluded that foreign investors still like to invest in the old-fashioned natural mining resources in this country.

Kazakhstan Employment and Workers Performance

As for employment, almost half of the population is classified as employed, both in the 2014 and 2018 figures, with an annual growth of half a percent. The employed make up about 95% of the total population (Ministry of National Economy, 2019). Fascinatingly, more than one-third of the labour force has earned a university degree, with an annual CAGR of 3%. This explains why Kazakhstan scores better than other landlocked developing countries in the classification of employment.

Although the number of foreign-owned registered enterprises in Kazakhstan is increasing by about 3% annually, the number of foreign workers (FLW) has decreased from more than 32 thousand in 2015 to just under 22 thousand in 2018, a decrease of almost 50% (Figure 2). This is in line with the policy of the Kazakh government under the Ministry of Labour & Social Protection of Population (2018) to protect the domestic labour market since 2001 through an annual quota for foreign workers that did not exceed 0.7% of the total labour force (Poór et al., 2017). The pie chart shows that China overtook Turkey as the largest contributor in 2017, providing about 56% of the total foreign labour force working in Kazakhstan. It is expected to support the Silk Road Project under the Belt Road Initiative Long Part Projects, which has been promoted by the Chinese government since 2014 (UNCTAD, 2014).
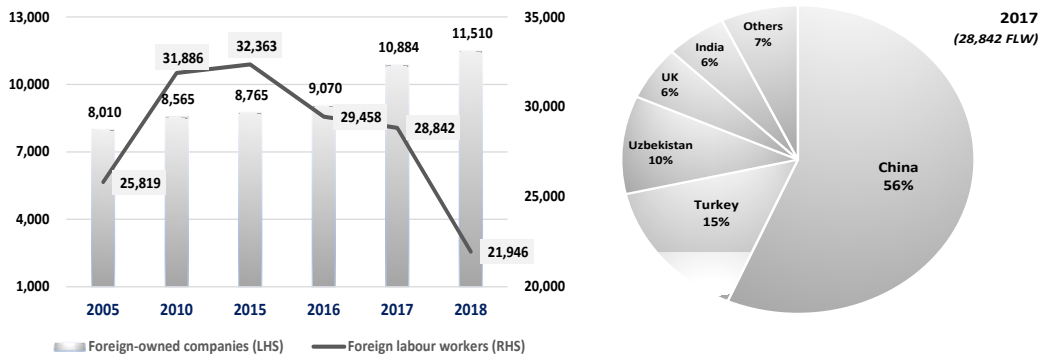
Source: Ministry of Labour & Social Protection of Population, Kazakhstan (2018)

Figure 2. Foreign-owned Companies Performance and Foreign Labour Workers (FLW) by Country of Origin

In 2017, more than 96% of the FLW quota was allocated to foreign professionals only, including 6% as the first category (top executives), 19% as the second category (heads of departments), 46% as the third category (specialists), and 25% as the fourth category (skilled workers), while the small percentage (less than 4%) was allocated to the rest as seasonal and transfer workers (Figure 3). The FLW quota for industries was dominated by construction, which accounted for almost one-third of the total quota. It is likely that the Kazakh government is focusing on pushing more infrastructure projects that require skilled labour to complete.
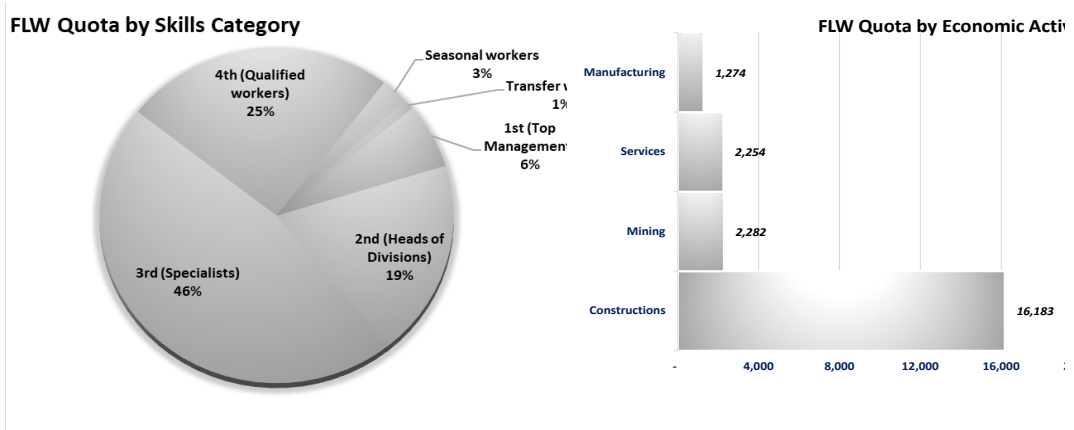
Source: Ministry of Labour & Social Protection of Population, Kazakhstan (2018)

Figure 3. Foreign Labour Workers Quota (FLW) by Skills & Activities in 2017

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Notwithstanding the maintenance of the highest share of registered foreign-owned enterprises (34%) in 2018, wholesale and retail trade is the only sector in Kazakhstan where the number of registered foreign-owned enterprises is declining, with an annual growth of 2% (Table 3).

Table 3. Number of Foreign-owned Companies in Kazakhstan (2005 and 2018)

Sectoral Group Industry	2005		2018		CAGR (%)
	Number	Shares (%)	Number	Shares (%)	
Agriculture, forestry & fishing	62	0.77%	400	3.48%	*15.42%*
Mining industry	83	1.04%	273	2.37%	*9.59%*
Manufacturing	521	6.50%	1,430	12.42%	*8.08%*
Constructions	765	9.55%	1,229	10.68%	*3.71%*
Wholesale & retail trade	5,164	64.47%	3,891	33.81%	*-2.15%*
Transportation & warehousing	234	2.92%	436	3.79%	*4.90%*
Professional, scientific/technical activities	394	4.92%	1,030	8.95%	*7.67%*
Accommodation & catering services	121	1.51%	234	2.03%	*5.20%*
Information & communication	107	1.34%	393	3.41%	*10.53%*
Financial & insurance activities	61	0.76%	188	1.63%	*9.04%*
Operations with real estate	121	1.51%	355	3.08%	*8.63%*
Administrative support services	113	1.41%	328	2.85%	*8.54%*
Education	40	0.50%	122	1.06%	*8.96%*
Healthcare & social services	33	0.41%	114	0.99%	*10.01%*
Arts, entertainment & recreation	63	0.79%	139	1.21%	*6.28%*
Others	128	1.60%	948	8.24%	*16.65%*
Total companies	**8,010**		**11,510**		**2.83%**

Source: Ministry of National Economy – Committee on Statistics, Kazakhstan (2019)

The highest percentage increase in registered foreign-owned enterprises was recorded in the agricultural sector, with a significant increase of 15%, followed by the information and communication sector (10%) and the social services sector (10%). After wholesale/trade, manufacturing and construction contributed about 12% and 11% respectively. It can thus be seen from the table that the interest of foreign investors to invest in the country has shifted to new and more promising industrial sectors. This is in line with Kazakhstan's current policy under the new government, which is making new efforts to diversify the country's economy through an industrial plan, away from traditional commodity sectors through the development of export-oriented manufacturing industries, both in agriculture and other manufacturing sectors (Dettoni, 2019).

Kazakhstan – National Culture Profile and the Culture Compass Country Comparison

Using the 6-D model of Hofstede et al. ([2010](#)) and Hofstede Insights ([2022](#)), the national cultural profile of Kazakhstan can be described as follows. In terms of PDI, with a very high score of 88, Kazakhstan is a nation in which those in power are very distant in society, which means that people in this society accept a hierarchical order. As for IDV, Kazakhstan has achieved a very low score of 20, indicating that it is a strongly collectivist society. The society fosters strong relationships in which everyone takes responsibility for and protects the other members of their group. Loyalty is paramount and takes precedence over most other social rules. The next dimension, related to the MAS, means that Kazakhstan has a share of both worlds equally: masculine for certain parts and feminine for others, but no clearly dominant cultural value. The very high score of 88 in the UAI also shows that Kazakhstan as a nation sees mechanisms to avoid ambiguity. People do not readily accept change and are very risk averse. They adhere to rigid codes of belief and behaviour and are intolerant of unorthodox behaviours and ideas. To minimise the degree of uncertainty, there is an emotional need for strict rules, laws, guidelines, and regulations. The LTO received a very high score of 85, indicating that Kazakh culture is very pragmatic. In societies with a pragmatic orientation, people believe that truth depends very much on the situation, context, and time. They show the ability to easily adapt traditions to changing conditions, a strong inclination to save and invest, frugality, and persistence in achieving results. Finally, Kazakhstan received a low score of 22 for the IVR dimension. This shows that Kazakhstan has a culture of restraint. Restrained societies have a tendency toward cynicism and pessimism. They also do not place much emphasis on leisure and control the satisfaction of their desires. People feel that their actions are constrained by social norms and that it is somehow wrong to indulge themselves. Figure [4](#) depicts the national 6-D cultural profile of Kazakhstan.
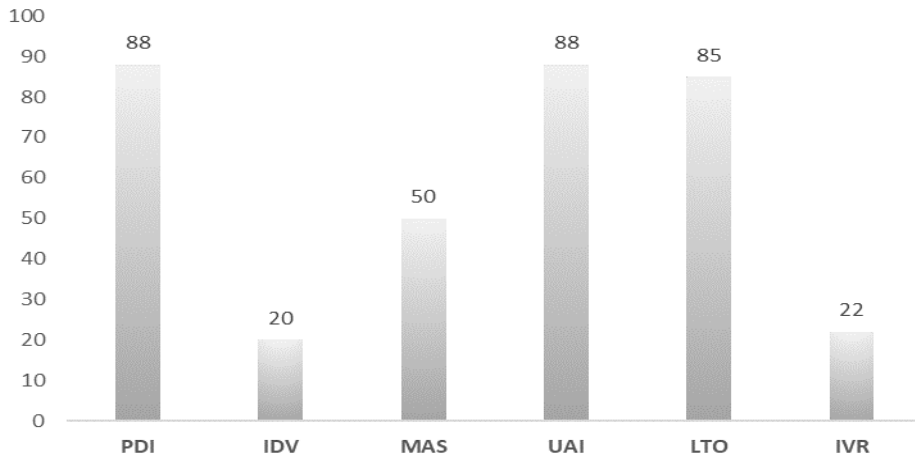
Source: Hofstede Insights (2022). Notes: PDI (Power Distance Index), IDV (Individualism), MAS (Masculinity), UAI (Uncertainty Avoidance Index), LTO (Long Term Orientation), IVR (Indulgence versus Restrain)

Figure 4. Kazakhstan 6-D Model National Culture Profile

The following figure (Figure 5) describes the comparison of the 6-D model of national culture between Kazakhstan and several countries that have contributed greatly to FDI over the past two decades (the Netherlands, the United States, the United Kingdom, France), and some of the MNCs country of origin, including Russia, Germany, China, and Japan (Hofstede Insights, 2022; National Bank of Kazakhstan, 2022). There found quite similarity high scores above 80: the PDI dimension between Kazakhstan, Russia and China; the UAI dimension, between Kazakhstan, Turkey, France, Japan and Russia; and the LTO dimension, between Kazakhstan, Switzerland, Japan, Germany, China and Russia. In terms of a lower scores (below 40), Kazakhstan shares the same experience of the IVR with Russia, and the IDV with China and Turkey.
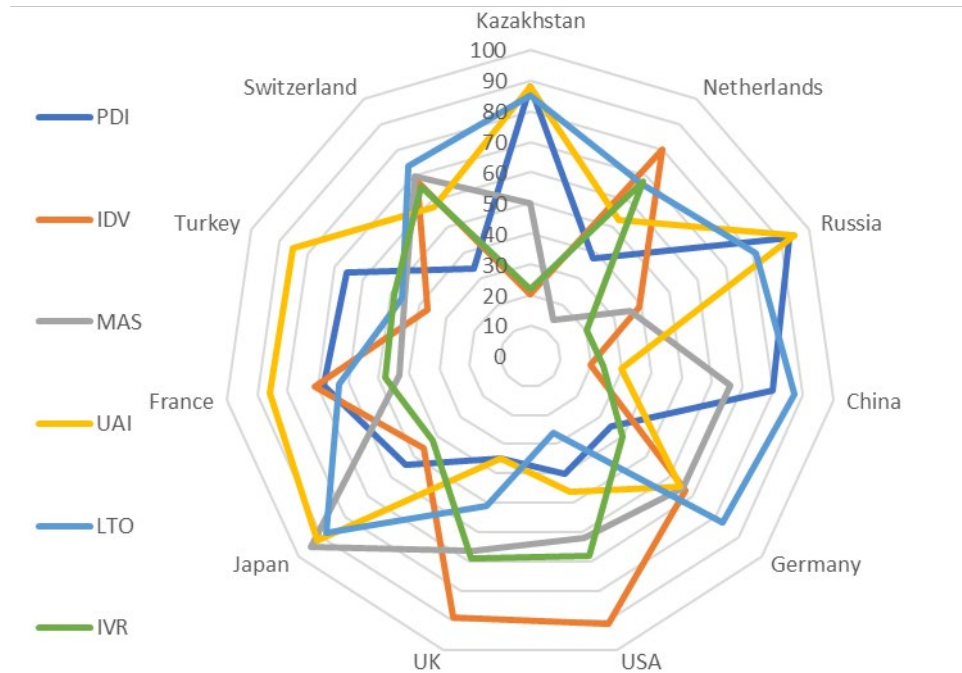
Source: Hofstede Insights ([2022](#)) – author own modifications. Source: Hofstede Insights (2022). Notes: PDI (Power Distance Index), IDV (Individualism), MAS (Masculinity), UAI (Uncertainty Avoidance Index), LTO (Long Term Orientation), IVR (Indulgence versus Restrain)

Figure 5. National Compass Culture Comparison

When looking at the leadership profile, it was found that among the different leadership styles, transformational, transactional, and paternal leadership have a greater impact on organisational performance in Kazakhstan (Mahmood et al., [2020](#)). Nearly two decades earlier, House et al. ([2004](#)) argued that in Kazakh communities, charismatic and team-oriented leadership styles are the most important factors in the need for leaders for this nation. Charismatic leaders possess the ability to inspire and motivate others to achieve a strong result, while team-oriented leaders possess the ability to build teams in a practical way to achieve a common goal among team members. In contrast, people in Kazakhstan gave the lowest score to the self-confident leader type because they believe they have negative qualities to move this nation forward in the future. Overall, social practises

and values as well as leadership styles in Kazakhstan are similar to those in other Eastern European clusters (House et al., 2004).

MNCs subsidiaries' Characteristics

Regarding the size of the MNCs' subsidiaries operating in Kazakhstan, about two-thirds can be classified as small medium-sized enterprises (SMEs) with less than 250 employees, about 26% as medium-sized enterprises with 251 to 1000 employees, and only 8% as larger subsidiaries with more than 2000 employees (Figure 6-Left). In line with data from the Kazakhstan Statistical Yearbook (Ministry of National Economy, 2019), more than 97% of registered foreign-owned enterprises were classified as SMEs.
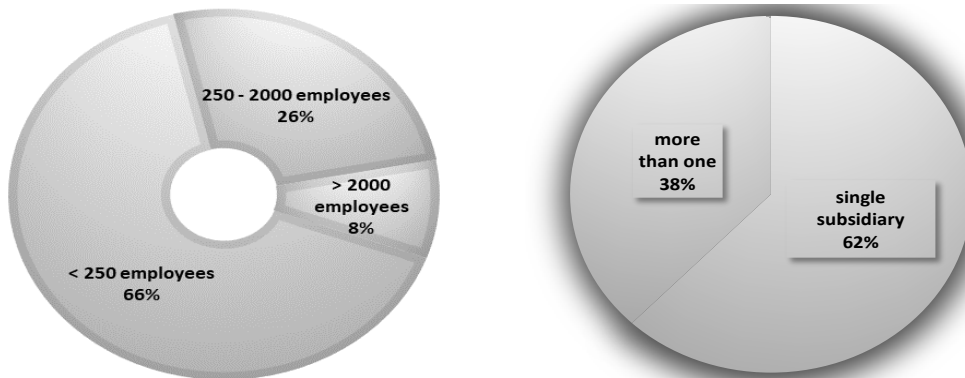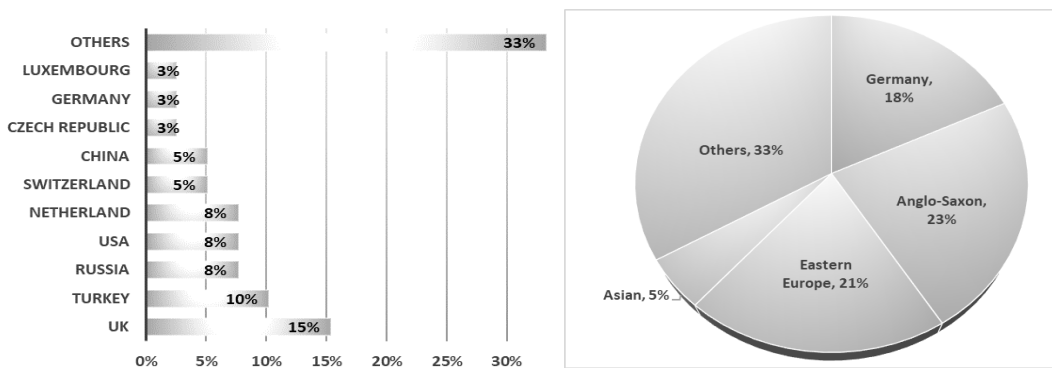

Source: (Poór et al., 2017) – *own modified*

Figure 6. Employees Proportion Number within MNCs subsidiaries (Left) & Subsidiaries Proportion Distribution within MNCs (Right)

Regarding the number of subsidiaries within MNCs, about 62% have only one subsidiary and 38% have more than one subsidiary (Figure 6 – Right). This means that the majority of MNCs did not expand their operations to the whole country during the survey period (Figure 6-Right). This survey also shows that, according to the country of origin of the parent company, the main sources were traditional European companies such as the UK (15%), the Netherlands (8%), Switzerland (5%) and Germany (3%), as well as Kazakhstan's neighbouring countries, including

Russia (8%) and China (5%), and the old ally, the USA (8%) (Figure 7 - Left). It can be concluded that the number of foreign investors in the country has not changed significantly since the days of its dependence. However, based on the latest statistical data from the National Bank of Kazakhstan, (2019) the trend in Chinese outward investment has increased by more than 15% annually since 2005. Similarly, the Netherlands' outward investment has increased by 10% annually for a decade.
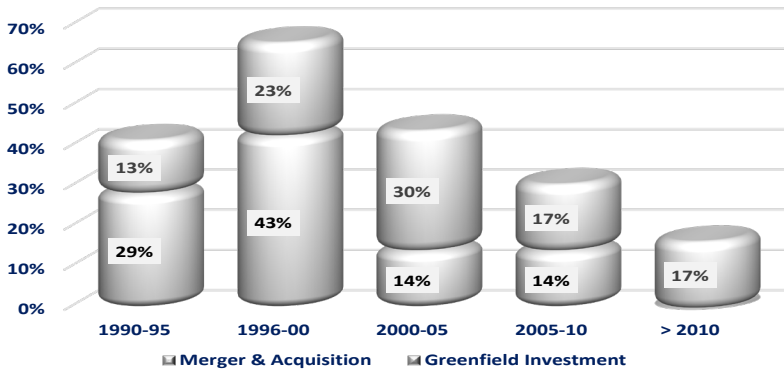

Source: (Poór et al., 2017) – *own modified*

Figure 7. Country Origin of Parents Companies (Left) & Culture Clusters of Parents Companies (Right)

Figure 7 (Right) describes the cultural clusters of parent companies operating in Kazakhstan. Since the majority of MNEs were from the European cultural area, the cultural clusters were dominated by this region, with the exception of a small part from the Asian cultural area. As confirmed by the GLOBE project (House et al., 2004), there are strong similarities between the cultures of Eastern Europe, Germany and Asia in terms of social cultural practices. Moreover, in terms of the 6-D model, most of all cultural dimensions, with the exception of MAS, were found to have Kazakh similarities with Russia and China (Hofstede Insights, 2022). Latukha & Malko (2019) assert that despite economic growth, the former Soviet legacy, i.e. Russia, still has a major influence on current HRM practices in Kazakh companies. It is believed that these country clusters can work together in the Kazakh business environment.

Foreign-owned companies in Kazakhstan invest mainly in the development of greenfield projects (Figure 8). Since independence, more than 80% of foreign investments are classified as greenfield projects, while mergers and acquisitions (M&A) account for only 20%. However, since the mid-1990s, the trend for both methods has declined by 10% annually. In fact, there was no M&A investment after 2010. This is believed to be due to the global economic and currency crisis in 2008.
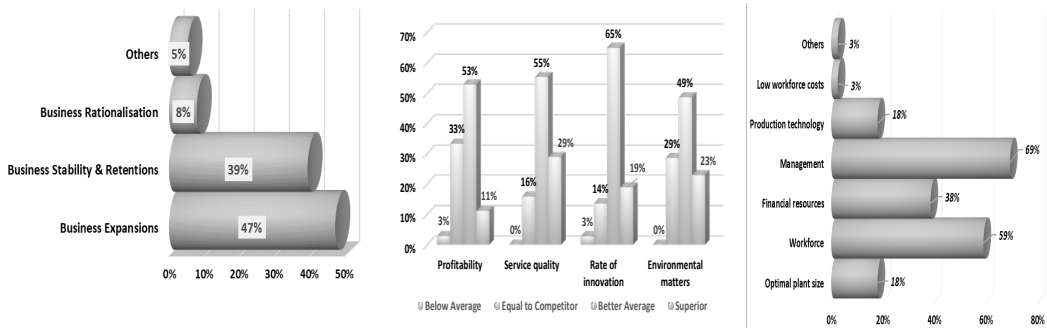

Source: (Poór et al., 2017) – *own modified*

Figure 8 – MNCs Entry Modes

MNCs subsidiaries Objectives Investments & Competitiveness Factors

Nearly half of the subsidiaries of multinational corporations in Kazakhstan indicated that their most important goal in investing in the country is business expansion, including market share development and portfolio expansion (Figure 9 - Left). It is assumed that these foreign investors consider Kazakhstan as a promising country for their visions. When comparing the competitive factors with the industry average within the existing companies, 65% claim that they have better innovation rates, and even 29% confirmed that they have better rates in the quality of services (Figure 9 - Middle). Overall, more than three times of the subsidiaries of the multinational companies confirm that they are better and superior compared to their competitors.
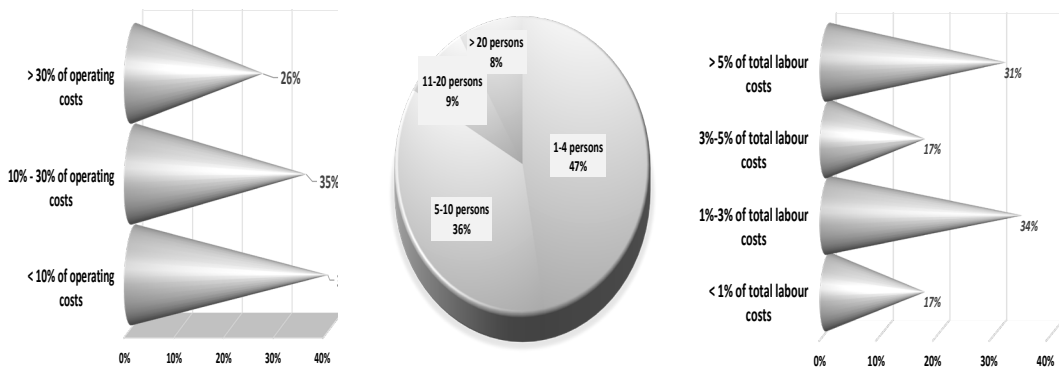
Source: Poor et al. (2017) – *own modified*

Figure 9 – MNCs Objectives Investments (Left), Competitiveness Factors Compared to Industry Average (Middle) & Key Importance of Organisational Competitiveness Factors (Right)

Regarding the factors of organisational competitiveness in the MNCs' subsidiaries, management and workforce competencies were considered the most important critical factors in daily operations, accounting for approximately 69% and 59%, respectively (Figure 9 - Right). Labour costs accounted for the lowest percentages, which means that most of the MNCs' subsidiaries investing in Kazakhstan do not consider lower labour costs as investment factors.

HRM Operations

According to Dooney (2015) of the Society for Human Resource Management (SHRM), the average ratio of HR to employees for all organisations is 2.57, while the ratio for small organisations with fewer than 250 full-time employees is 3.40, which means that a single employee (HR) should be responsible for about 74 employees. The trend seems to be better in the subsidiaries of multinational corporations in Kazakhstan: 433 HR employees come to 19 thousand employees, i.e. every HR employee comes to 43 employees. Figure 10 (Middle) shows in detail how the total number of HR employees is distributed among the subsidiaries of MNCs. Due to the special characteristics of SMEs, about 83% of the subsidiaries of MNCs employ less than 10 HR employees in their companies. Moreover, only 8% of the companies hire more than 20 HR employees.

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Regarding the share of labour costs in the total operating costs of the companies, almost 40% of the subsidiaries of the MNCs spent less than 10%, while about 35% spent between 10% and 30% and only 26% spent more than 30% (Figure 10 - Left. For the annual training budget, only 31% of MNCs subsidiaries spent more than 5% of their total labour costs and more than half of MNCs subsidiaries spent less than 3% (Figure 10 - Right).

Source: Poor et al. (2017) – own modified.

Figure 10 – Proportion Costs of Labour (Left), MNCs Subsidiaries of HRM Staff Numbers (Middle) & Annual Training Budget (Right)

Figure 11 (Left) shows the share of expatriates and Kazakhs in patriates based on managerial and non-managerial positions. In terms of the share of expatriates, more than 63% of all expatriates were in managerial positions, of which almost half consisted of 6 to 10 people and only 4% employed more than 10 people in the MNCs' subsidiaries. In the case of non-management positions, expatriates did not fill more than half of the positions in order to comply with Kazakhstan government regulations protecting non-management positions that should be reserved for local workers only.
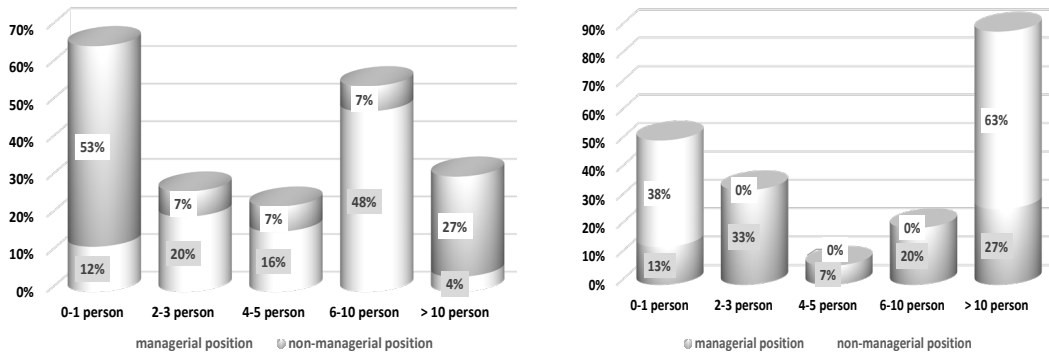
Source: Poor et al. (2017) – *own modified.*

Figure 11 – Proportion Numbers of Foreign Expatriates (Left) & Kazakhs In patriates for Managerial and Non-Managerial Positions (Right)

For Kazakh in-patriates, the situation seems to be quite different, especially in non-managerial positions, where more than 10 people of in-patriates worked in 63% of MNCs' subsidiaries. In the case of senior executives, 2-3 persons worked in 33% of the subsidiaries of the MNCs. However, overall, managerial positions were held by more than 60% of expatriates and in-patriates in both cases. Harzing et al., (2016) argue that the aim of employing expatriates and in-patriates in managerial positions is to enable greater knowledge transfer between their parents' home companies and the local host country, as they have better and wider access to information and knowledge and can exert influence on their parents' home companies.

HR Comparative Practices and Functions

Regarding the HR functional guidelines provided by the parent company to its subsidiaries, it became clear that the majority of them (62%) only provide general HR guidelines and frameworks. Only 8% provide more detailed HR models in the form of standard operating procedures (SOP), and the remaining 16% give freedom to perform HR and 14% provide outsourcing for HR functions and practices (Figure 12 - Middle). Regarding the concept of comparative HRM practices based on the work of Sparrow et al., (2017), it seems that the majority of subsidiaries of

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multinational companies in Kazakhstan already apply the concept of divergence of HRM practices, where the parent company gives the local HR department the necessary ease and freedom to retain certain aspects of local cultures, work structures and performance, rather than enforcing the concept of convergence, where all HRM policies, functions and practices are adopted by the parent companies.
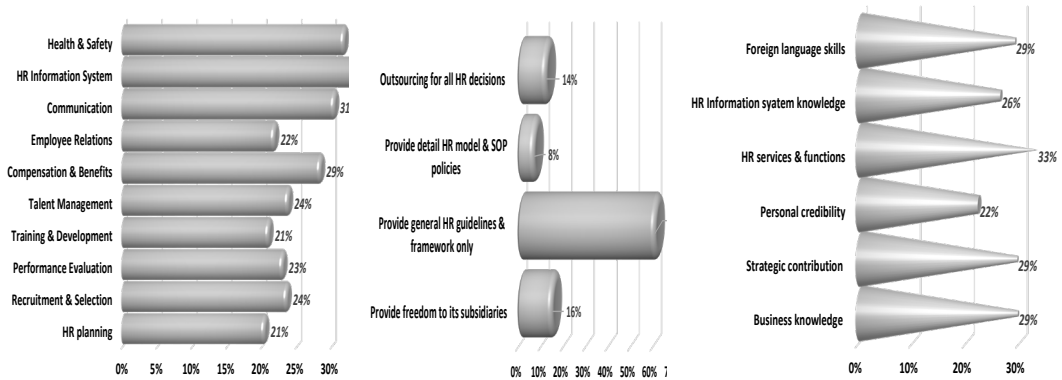
Source: Poor et al. (2017) – *own modified.*

Figure 12 – HR Critical Areas (Left), HR Functions from Parents Companies (Middle) & HR Manager Key Competencies (Right)

There are three primary HR functions critical areas in the subsidiaries of MNCs that should be seriously operated, namely HR information system (HRIS) with 33%, followed by health and safety (32%) and communication (31%) (Figure 12 - Left). On the other hand, the least critical areas were HR planning (21%) and recruitment and selection (24%). In terms of the HR key skills managers should possess, HR services and functions topped the list at 33%, followed by business knowledge, strategic contribution and foreign language skills at 29% each (Figure 12 - Right). In contrast, personal credibility, such as achieving results, communication skills and effective relationships were rated lowest at 22%

As far as decision making regarding HR practices and functions within subsidiaries of MNCs is concerned, there is a clear division between the local HR department (LHD) on the one hand and the local line management (LLM) representing the

foreign parent company on the other. However, about one-third of HR decisions were in the hands of LHD and only 19% in the hands of LLM, and the rest of HR functions were exchanged between the two in consultative work.

Figure 13 shows that LHD made the majority of decisions about HR functions and practices. For example, 46% decisions in the HR management IT system, 41% decisions in employee communications, 39% decisions in recruitment, and 36% decisions in talent management. While only one HR function and practice, health and safety, had 38% decisions made directly by LLM. It can be concluded that HR in the parent companies gives the main control and authority over HR functions, policies and practices to their subsidiaries of the MNCs operating in Kazakhstan.
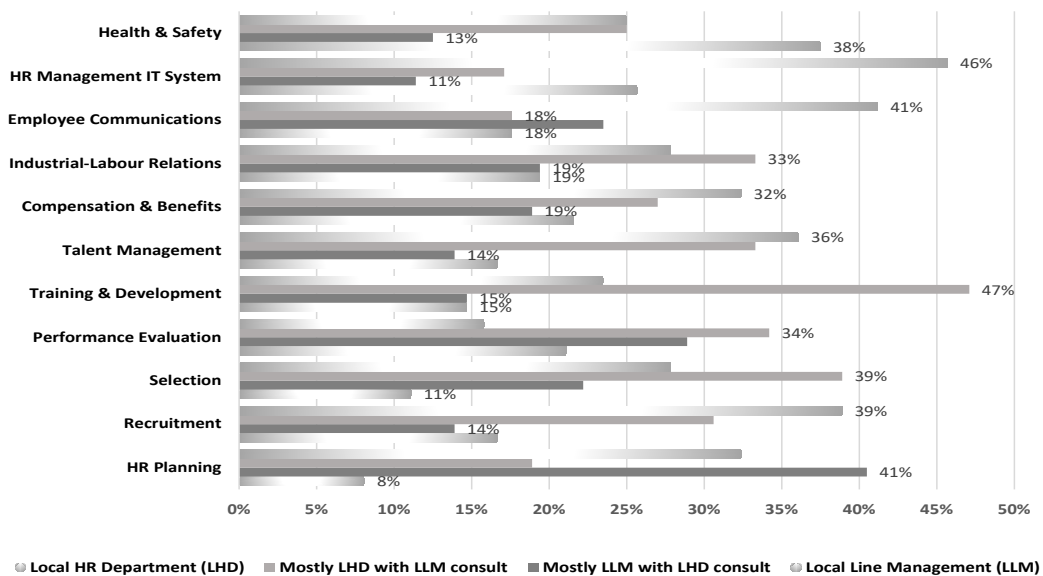
Source: Poor et al. (2017) – *own modified*. LHD = Local HR Department; LLM = Local Line Management

Figure 13 – HR Comparative Functions & Practices Decision Maker between LHD and LLM

As Edwin (2015) argues, in today's dynamic and changing business environment, outsourcing is seen as a dominant preference for the organisation to focus on core competencies while reducing operating costs and improving services. This can be observed in the HR department in the subsidiaries of multinational companies in

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Kazakhstan, where more than two-thirds of HR functions and practises (HRFP) are outsourced, with the highest share of talent management at 88%, followed by recruitment and selection processes at 79% and 74%, respectively. The highest proportion of HRFP performed internally is dedicated to planning HR (49%), followed by training and development (46%) and industrial relations (42%).

Figure 14 (Right) attempts to provide information on the benefits of HRFP implemented in the subsidiaries of MNCs. It shows that management obtains the highest share of benefits with 58% of the best HRFP implementations. Employees also benefit with 52%, followed by the increasing role of HRFP as a business partner with 55%.
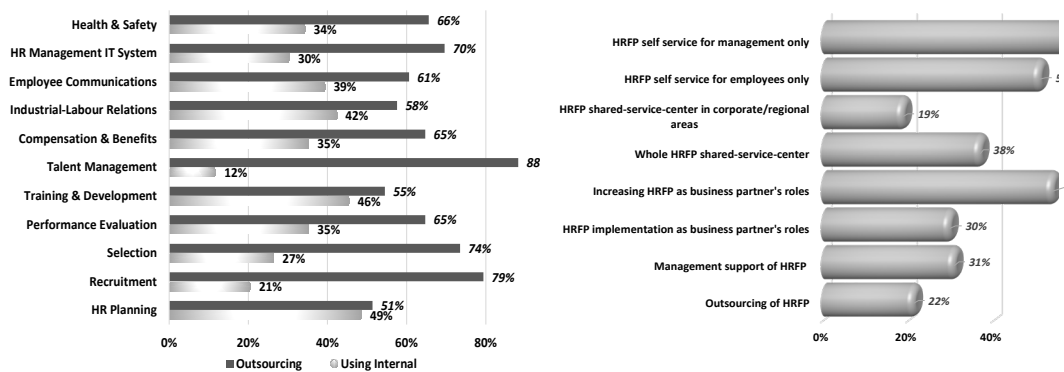
Source: Poor et al. (2017) – *own modified*

Figure 14 – HR Functions & Practices (HRFP) of Internal-used vs Outsourcing (Left) & HRFP Implemented Transformation (Right)

If there is no separate department HR in the subsidiaries of Kazakh MNCs, CEOs (18%) can act as HR decision-makers in the implementation of all HRFP, followed by the heads of administration (10%) and the head of the finance department (3%) (Figure 15 - Left).
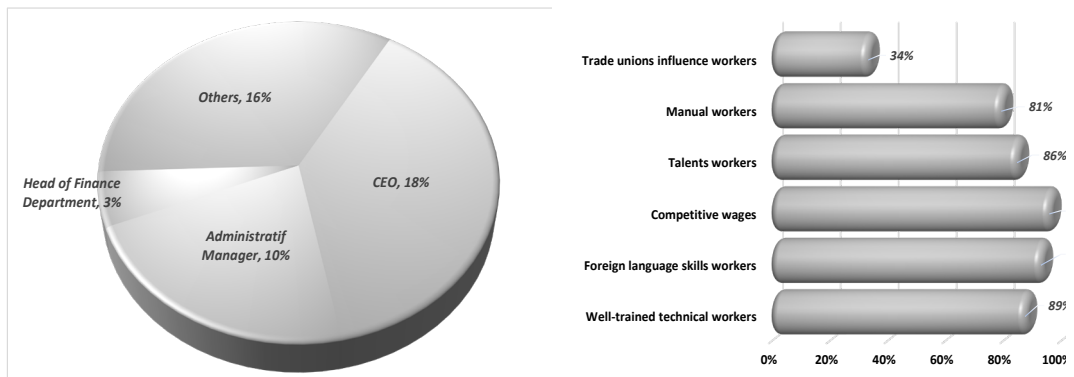
Source: Poor et al. ([2017](#)) – *own modified*

Figure 15 – HR Decision Makers in Non-existence HR Department (Left) and HR "Hot" Issues for Staff Retention (Right)

Figure 15 (Right) describes the hottest topics in employee retention from HR. It was found that competitive wages topped the list at 97%, followed by workers with foreign language skills (94%) and well-trained technical professionals (89%). The highest point of wages was reportedly due to the devaluation of the Kazakh currency during the survey period between 2015 and 2016 (Poór et al., [2017](#)).

Figure 16, on the other hand, shows the compelling methods of HR people in their skill development and knowledge transfer flow. The methods HR of staff competence development can be built through both formal and informal learning conducted internally and externally. It can be seen that 73% of local formal HR education and training and 72% of informal learning in the parent companies are the main contribution of the methods (Figure [16](#) - Left). This means that both methods should be combined to achieve the best results of HR skills development.

To achieve the best results HR of knowledge transfer between subsidiaries of MNCs, the survey revealed that knowledge flow between HR departments within subsidiaries is the most significant contributor (about 85%), followed by knowledge flow from parent companies to subsidiaries (about 80%) and also between subsidiaries (79%) (Figure [16](#) - Right).   However, according to Bengoa & Kaufmann ([2014](#)), in order to achieve the best results in knowledge transfer and key practises, the parties involved, including local companies, subsidiaries and parent companies, should perform dynamic interactive actions. They also argued that both parties,

especially the parent companies, should respect the structural dependence on the local culture.
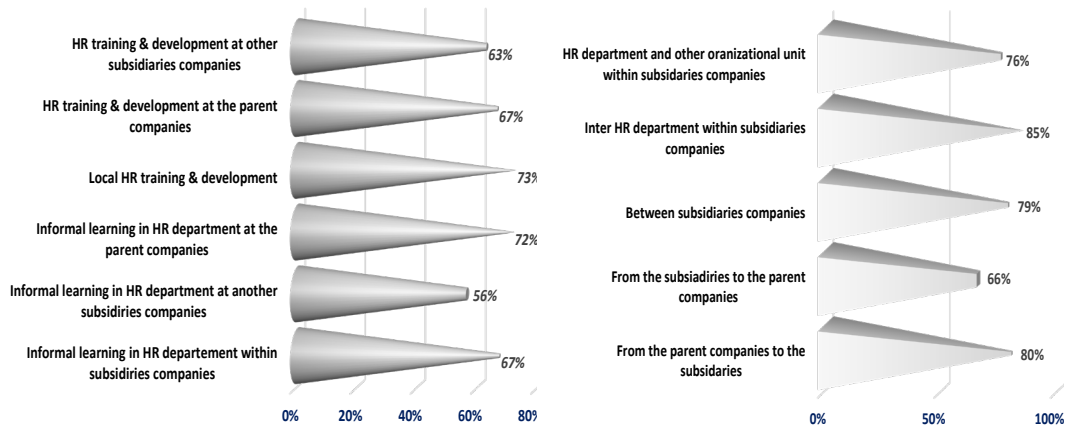
Source: Poor et al. (2017) – *own modified*

Figure 16 – The Importance Methods between HR Personnel Competence Development (Left) and HR Knowledge Transfer Flows (Right)

Conclusion, Managerial Implications and Limitation

This report has already discussed and analyzed the international HRM functions and practices in the subsidiaries of the multinational companies in Kazakhstan. There are four main findings related to the national cultural cluster type in Kazakhstan and comparable HRM functions and practices. First, Kazakhstan belongs to the Eastern European cultural clusters with high scores on the cultural dimensions of power distance and group collectivism in terms of social cultural practices. In terms of leadership style, Kazakhs promote charismatic and team-oriented styles. Therefore, it is believed that Kazakh societies can cooperate with other communities that have very similar values, including other Eastern European countries and Asian cultures. Second, the subsidiaries of the multinational companies in Kazakhstan tend to adopt the divergence of HRM functions and practices instead of the convergence approach by giving more freedom to the local HR departments to manage their HR roles and policies and also giving more authority to the local HR department to make their own HR decisions, which is

considered to be the best for the companies. Third, most subsidiaries of MNCs outsource their HR practices, especially in talent management and recruitment, in order to attract the best and most productive employees to the company. Fourth, most of the expatriates and in-patriates working in the MNCs' subsidiaries are in managerial positions to ensure knowledge transfer between the parents' home companies and the local host country and to comply with the Kazakh government's quota policy for foreign workers.

This study is of great use to researchers, HR practitioners in the private sector and public administration to understand the importance of the characteristics and behaviours of human resource policies and practices in subsidiaries of multinational companies in a country to improve labour productivity and business efficiency. To achieve better results when working with different national cultures, fostering cultural intelligence and knowledge acquisition between expatriates and local employees is of utmost importance (Kozhakhmet & Nurgabdeshov, 2022).

However, in addition to its advantages, this study has its limitations as it is based only on secondary data and information from previous research and surveys. Therefore, further field studies are needed to comprehensively investigate HRM practices and their implementation.

References

1. Azam, M., & Ahmed, A. M. (2015). Role of human capital and foreign direct investment in promoting economic growth: Evidence from Commonwealth of dependent States. *International Journal of Social Economics*. https://doi.org/10.1108/IJSE-05-2014-0092

2. Bengoa, D. S., & Kaufmann, H. R. (2014). Questioning western knowledge transfer methodologies: Toward a reciprocal and intercultural transfer of knowledge. *Thunderbird International Business Review*. https://doi.org/10.1002/tie.21593

3. Brewster, C., Houldsworth, E., Sparrow, P., & Vernon, G. (2016). *International human resource management*. Kogan Page Publishers.

4. Bureau of National Statistics. (2022). *Socio-economic development of the Republic of Kazakhstan January 2022 Statistical bulletin.* https://stat.gov.kz/edition/publication/month

5. De Cieri, H. (2017). *International human resource management: from cross-cultural management to managing a diverse workforce.* Routledge.

6. Dettoni, J. (2019). Kazakhstan Enters a New Era. Special report. *FDI Magazine.*

7. Dooney, J. (2015). *How Organizational Staff Size Influences HR Metrics.* https://www.shrm.org/ResourcesAndTools/business-solutions/Documents/Organizational Staff Size.pdf

8. Dowling, P. J., Festing, M, & Engle, A. . (2013). *International Human Resource Management.* Cengage Learning EMEA.

9. Edwards, T., & Rees, C. (2017). International Human Resource Management : Globalization, National Systems and Multinational companies. In *International Human Resource Management.*

10. Edwards, T., Schnyder, G., & Fortwengel, J. (2019). Mapping the impact of home-and host-country institutions on human resource management in emerging market multinational companies: A conceptual framework. *Thunderbird International Business Review, 61*(3), 531–544. https://doi.org/10.1002/tie.22036

11. Edwin. (2015). Strategic Management of the Benefits and Challenges of HR Outsourcing in Effective Organizational Management. *Journal of Business Studies Quarterly.*

12. Harzing, A. W., Pudelko, M., & Sebastian Reiche, B. (2016). The Bridging Role of Expatriates and Inpatriates in Knowledge Transfer in Multinational Corporations. *Human Resource Management.* https://doi.org/10.1002/hrm.21681

13. Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: software of the mind: intercultural cooperation and its importance for survival.* McGraw-Hill.

14. Hofstede, G. J. (2015). Culture's causes: the next challenge. *Cross Cultural Management.* https://doi.org/10.1108/CCM-03-2015-0040

15. Hofstede Insights. (2022). *Hofstede Insights - Culture Compass Country*

Comparison.   https://www.hofstede-insights.com/country-comparison/kazakhstan/

16. House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). Culture, Leadership , and Organizations. *The GLOBE Study of 62 Societies*.

17. Kozhakhmet, S., & Nurgabdeshov, A. (2022). Knowledge acquisition of Chinese expatriates: managing Chinese MNEs in Kazakhstan. *Journal of International Management*, *28*(2), 100919. https://doi.org/10.1016/j.intman.2021.100919

18. Kozhakhmetova, A., Zhidebekkyzy, A., Turginbayeva, A., & Akhmetova, Z. (2019). Modelling of project success factors: A cross-cultural comparison. *Economics & Sociology*, *12*(2), 219–234. https://doi.org/10.14254/2071-789X.2019/12-2/13

19. Latukha, M., & Malko, K. (2019). Westernization or localization of human resource management practices in CIS countries? Evidence from Kazakh firms. *International Journal of Emerging Markets*. https://doi.org/10.1108/IJOEM-05-2016-0122

20. Mahmood, M., Uddin, M. A., Ostrovskiy, A., & Orazalin, N. (2020). Effectiveness of business leadership in the Eurasian context: empirical evidence from Kazakhstan. *Journal of Management Development*. https://doi.org/10.1108/JMD-05-2019-0154

21. Manzoor, F., Wei, L., Bányai, T., Nurunnabi, M., & Subhan, Q. A. (2019). An examination of sustainable HRM practices on job performance: An application of training as a moderator. *Sustainability*, *11*(8), 2263. https://doi.org/10.3390/su11082263

22. Minbaeva, D. B. (2005). HRM practices and MNC knowledge transfer. *Personnel Review*. https://doi.org/10.1108/00483480510571914

23. Ministry of Labour & Social Protection of Population. (2018). *HELP attracting foreign labour force*. https://www.enbek.gov.kz/en/node/344832

24. Ministry of National Economy. (2019). *Statistical Year Book 2018*.

25. Mohanty, S., & Sethi, N. (2019). Outward FDI, human capital and economic growth in BRICS countries: an empirical insight. *Transnational Corporations Review*, *11*(3), 235–249. https://doi.org/10.1080/19186444.2019.1657347

26. National Bank of Kazakhstan. (2019). *Kazakhstan: Balance of Payments and*

External Debt.

27. National Bank of Kazakhstan. (2022). *International investment position (IIP) of Kazakhstan.* https://www.nationalbank.kz/en/news/mezhdunarodnaya-investicionnaya-poziciya

28. OECD. (2018). Reforming Kazakhstan: Progress, Challenges and Opportunities. *Project Insights.*

29. Poór, J. (2013). Internationalization and globalization in human resource management. *Budapest. Komplex Kiadó.*

30. Poór, J., Engle, A. D., & Brewster, C. (2017). *HRM in Transition-practices of MNC-subsidiaries in Central and Eastern Europe, Russia and Kazakhstan (2015-2016).* J. Selye University.

31. Renkema, M., Bos-Nehles, A., & Meijerink, J. (2020). Implications of self-managing teams for the HRM function. *Baltic Journal of Management.* https://doi.org/10.1108/BJM-06-2018-0230

32. Schwab, K. (2019). The Global Competiitiveness Report 2019. In *World Economic Forum-WEF.* https://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf

33. Sparrow, P., Schuler, R. S., & Jackson, S. E. (2017). Convergence or divergence: Human resource practices and policies for competitive advantage worldwide. In *International Human Resource Management: From Cross-Cultural Management to Managing a Diverse Workforce.* https://doi.org/10.4324/9781315252025-16

34. Stone, R. J., Cox, A., & Gavin, M. (2020). *Human resource management.* John Wiley & Sons.

35. Stor, M., & Haromszeki, Ł. (2019). Organizational leadership practices in MNCs: the effect of the HRs value as a competitive factor and the FDI structure. *Journal of Transnational Management*, *24*(2), 83–121. https://doi.org/10.1080/15475778.2019.1608748

36. Susanto, H., Leu, F.-Y., Chen, C. K., & Mohiddin, F. (2019). *Managing human capital in today's globalization: A management information system perspective.* CRC Press.

37. Tan, C., & Nasurdin, A. (2011). Human resource management practices and organizational innovation: assessing the mediating role of knowledge management effectiveness. *Electronic Journal of Knowledge Management*.

38. UNCTAD. (2014). *Investment Guide to the Silk Road*.

39. UNCTAD. (2019). *World Investment Report - Special Economic Zones*.

40. Wacker, K. M. (2013). *On the measurement of foreign direct investment and its relationship to activities of multinational corporations*.

41. World Bank. (2021). *GDP per capita, PPP (current international $) - Kazakhstan*. https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD?locations=KZ

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Abstract

The chemicals and petrochemicals industry is currently one of the world's leading international economies. But at the same time it also remains an industry where harmful, difficult and hazardous working conditions for workers are present. All occupational safety and health protection measures must be aimed at achieving the main objective of reducing the level of occupational diseases on the basis of, first and foremost, preventive work on risk factors. Professional activity at chemical and petrochemical enterprises reveals the necessity to develop a clear algorithm of occupational risk analysis, which has a common basis with assessment of other technical risks. The chemical and petrochemical industry is an industry with a large number of risks: risk of fire, risk of explosion, risk of leakage of harmful chemicals, risk of evaporation of harmful chemicals. All these risks entail risks of getting sick: respiratory tract cancer, etc. and the resulting disability or disablement.

This article examines some methods of occupational risk assessment in the chemical and petrochemical industry. Analysis of methodologies such as the ranking of occupational hazards, the Kwij Al-Dalemi occupational risk assessment, as well as the French experience of the Laboratory Laboratory Network-Prevention Network-National Surveillance for Occupational Diseases (Research National de Vigilance et de Prevention des Pathologies Professionneles, RNV3P) and the US experience of LHAT-Laboratory for Hazardous Substances Assessment in Iowa State

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in the USA. The article details the methodology for ranking occupational hazards in chemical plants and shows the ranking of occupational hazards by priority and their short- and long-term exposure.

Keywords: chemical and petrochemical industry, occupational risk assessment, harmful factors, chemicals, laboratories, diseases.

Introduction

Occupational risk assessment methodology is very important for early detection of occupational diseases in chemical and petrochemical plants. This will help to reduce the number of deaths and disabilities due to exposure to hazardous chemicals on human health.

The analysed methodologies on occupational risk assessment, enable accurate assessment of occupational risks at various chemical and petrochemical enterprises in the world and can be recommended for the creation of similar laboratories and systems for studying occupational risk assessment in the healthcare system of Kazakhstan.

The aim of this paper is to analyse risk assessment methodologies for workers in the chemical and petrochemical industry in Kazakhstan.

To date, there are a huge number of methodologies for risk assessment in the chemical and petrochemical industry. In particular, various scholars have considered risks in the chemical and petrochemical industry (Zheng et al., 2020). For example, peculiarities of professional risks are: nature, big variety and unpredictable consequences. In its essence, professional risk has two components, which are equal in importance, but negative in nature: a priori and a posteriori (Al-Dalemi, 2013).

A priori, which may be due to harmful or hazardous working conditions. A posteriori, which allows to estimate the damage to the health of the work of enterprises in the chemical and petrochemical industry. Nowadays risk can be represented as a derivative of a certain risk of a situation, expressed through the

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frequency and consequences of risk realisation (Kucheneva, 2009). The World Health Organization defines occupational risk as a mathematical concept reflecting severity and frequency of adverse reactions of a human body to the given exposition of a harmful factor of the industrial environment.

The algorithm for analysing occupational risk to protect staff from accidents and occupational diseases can be presented as follows (Dabbagh & Yousefi, 2019):

- Hazard identification (identifying harmful and dangerous factors in the working environment and work process);
- Identifying possible causes leading to undesirable events;
- Risk assessment (probability of the risk occurring, determination of the magnitude of the consequences of an undesirable event, taking into account the potential severity of the incident and the harm to human health, conclusion on the acceptability or unacceptability of the risk);
- choosing and assessing the means of protection against each type of hazard;
- assessment of the residual risk after the implementation of the protection system;
- assessment of the system to protect the life and health of staff as a whole according to the class of working conditions.

Literature Review

At each stage of the analysis there are specific mechanisms, the application of which is determined by the peculiarities of the working environment, economic opportunities of the enterprise, professional competence of the personnel, allowing to make the transition from reactive management of labour protection (compensation for harm to health) to the preactive one (prevention of harm), i.e. to preventive measures (Yousefi, Jahangoshai Rezaee, M., & Moradi, 2020). In the Research Institute of Occupational Medicine of RAMS, an assumption was made about the possibility of risk value on the index of diseases, which summarizes their frequency and severity in one-number value (Viel et al., 2000).

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Russian researcher Kucheneva (2009) has proposed two ways of assessing a posteriori risk: the first is to estimate morbidity; the second is to add up all risks of work-related morbidity and to add up all risks of occupational injuries, occupational diseases and morbidity with temporary disability from accidents.

The Russian scientist Izmerov (Kucheneva, 2009) also investigated several options for assessing occupational risk in the petrochemical industry. These are the method of complex point assessments; the Fi-Kinney method and assessment through an occupational risk index (RPI).

Specific standards - occupational exposure limits (OELs) - are developed as the main reference points for the control of hazards and are used in the development of protective measures by industrial hygienists to decide on safe levels of exposure to various chemicals that are present in the workplace(Safety and health in the use of chemicals at work, 2014, pp.6-7). The definition and use of these standards (RELs) for certain chemicals is the main working principle. An ELL is a limit of exposure expressed in numerical form. Generally, these limits define a weighted average level of exposure, where no health problems should arise for plant workers (Safety and health in the use of chemicals at work, 2014, p.6).

In particular, the occupational exposure limit (OEL) for benzene should be calculated taking into account the possibility of causing leukaemia in workers. However, such a standard may not take into account another factor, that in addition to the possibility of getting leukaemia, this substance is also very flammable and here the risks of fire must be provided for (Safety and health in the use of chemicals at work, 2014, p.7). It is also possible to adopt an established standard for one metal that provides for a certain occupational exposure limit (OEL), but for another metal this occupational exposure limit may not be provided for. Thus, it is necessary to provide for the exposure of all possible metals to human health who have contact with chemicals throughout the entire work cycle (Safety and health in the use of chemicals at work, 2014, p.7).

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To address these problems in assessing human health exposures to hazardous metals, a method that has been applied by the LHAT- Hazardous Substances Assessment Laboratory in the US state of Iowa could be used (Gibson et al., 2014).

This laboratory uses the types of hazards used by each laboratory group (Gibson & Wayne, 2013):

1) biohazards;
2) chemical hazards;
3) radiation hazard;
4) laser danger;
5) monomolecular hazards.

In particular, the LHAT laboratory uses 4 main categories (Jones, 2005), (Cooper & Philips, 2004):

- Level A: High level (pyrophoric chemicals);
- Level B: Severe hazard level (severe fire);
- Level C: Medium hazard level (low hazard);
- Level D: Low level (low ignition level).

That is, each petrochemical facility can be assessed according to the levels of risk of impact on human health and safety.

The experience of France in identifying risks to workers in chemical plants could also be used (Faisander, 2011).

In France, for example, a prevention network, the National Surveillance for Occupational Diseases (Research National de Vigilance et de Prevention des Pathologies Professionneles, RNV3P) has been established (Walsh et al., 2005). This network monitors all patients who fall ill at chemical and petrochemical plants.

In order to determine the relationship between diseases and occupational exposures suffered by workers in petrochemical plants and to determine how these exposures influence the occurrence of disease, the Database Individual Occupational Copying Concept - ONR (Bonnetere et al., 2008) could be used.

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In the context of occupational health, the French National Network for Surveillance and Prevention of Occupational Diseases (RNV3P) has created a growing database that records all occupational health problems (OHP) diagnosed by a network of specialist doctors each year (Bonneterre et al., 2009).

This network monitors all patients who fall ill at chemical and petrochemical plants. To determine the relationship between diseases and the composite occupational exposures that have been received at petrochemical plants and to determine how these exposures affect the occurrence of these diseases. The Concept of individual occupational diseases of employees from the radiation of substances of chemical and petrochemical enterprises could be used (Faisandier et al., 2007).

In order to process this RNV3P data is given in the form of a relationship network, where each RNV3P is represented in the RNV3P database as a node (vertex) $V=(p,e)^T$, which has a unique combination of diseases (pathology) "p" and it is associated with 3 dimensional exposure composite constructs $e=(h,o,s)^T$, which are characterised by hazard set "h" and occupations "o" and 5 (Wild, 2005).

Conventionally, the hazard vector h=(h1, h2, h3 ,h4, h5) can include from 1 to 5 explicit hazards that are present in occupational activities and are characterised as "o" and "s" and are suspected to be derived from illness. Each node (i=OHP) is weighted by a common number "w" an identical ONR copy in the database) of which each network can be held.

Methodology

From this point onwards, the influence graph can be generated in the following order.

Say C_{ij-n}(Co≤C_{ij} ≤ 5) is defined by the number of hazards that are separated by 2 vertices $U_{i,}$,U,U_j (i,j=1,2......v) appearing each as $^{\eta}$ copies in this database (Barabasi, 2007).

The network aims to provide and develop expertise on possible diseases: the relationship between exposures, using the RNV3P database, to develop OHP

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surveillance and to identify emerging associations between diseases and occupational exposures (Goh, 2007)
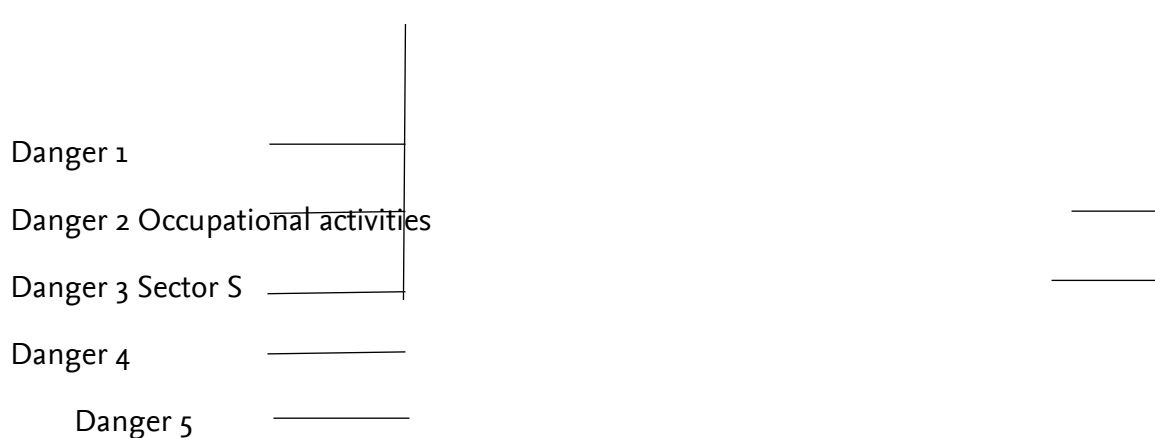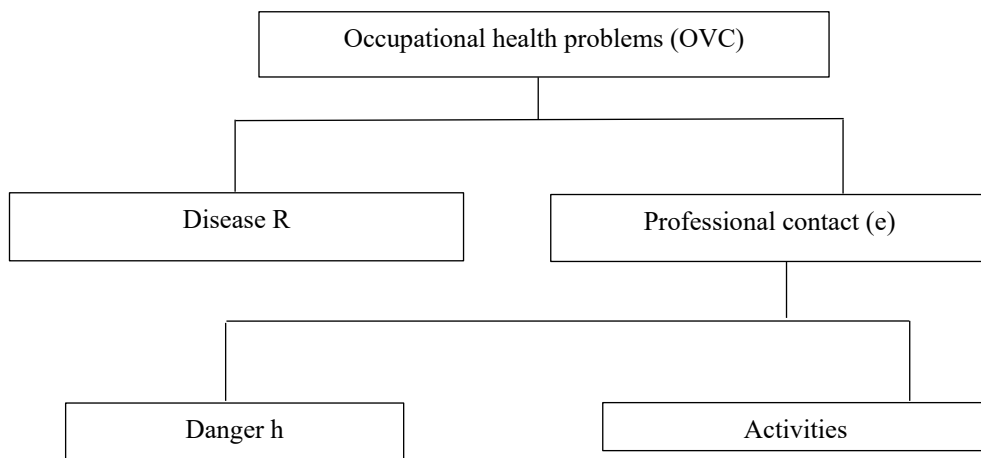

Figure 1. Health problems resulting from professional activities

Note-compiled by the author from the source (Faisandier et al.)

For example P = Hodgkin's lymphoma (Goh et al., 2007, p. 83) and (Muller et al., 2005)

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$$h = \begin{cases} h1 - solvents\ (35110) \\ h2 - benzene\quad (21311) \\ h3 - ionizing\ radiation\ (47100) \end{cases}$$

A theoretical framework for occupational exposure, defined as a network of OHP associated with occupational exposures, was developed as a new approach that allowed the characterization and analysis of the disease-exposure relationship represented in the RNV3P database in the form of a relational network. Further, occupational exposures are structured in terms of occupational exposure groups, which constitute informative subsets of hazards considered as a spectrum of the occupational exposure backbone tree, potentially associated with disease (Alexander et al., 2007).

To illustrate the vast possibilities of this method, the RNV3P uses an exposure approach.

As a result, it was found that professional work in NHL (National Chemical Laboratory) Exposure-Function - can be described in terms of 86 embedded exposure groups, defined as a set of common data of at least one component of the professional multi-exposure (Fabro-Preay et al., 2001) (Rana et al., 2021). For example, "organic solvents and diluents" are the most representative threat associated with NHL. Exposure can also be related to "benzene", "ionizing radiations" or "agricultural products" (Viel et al., 2000). Based on the knowledge stored in a database of experts by physicians, occupational exposures are a crucial step towards the development of monitoring of multiple exposures associated with this disease.

Let us consider the following method of assessing occupational risks developed by Imasheva, Nurgalieva, Alpysbaeva at the Republican Scientific Research Institute for Labor Protection of the Ministry of Labor and Population of Kazakhstan (Imasheva et al., 2011). In particular, it was proposed to use the method of a priori ranking of factors in processing data obtained from a survey of respondents.

This experiment provides an opportunity to identify the object of study, to confirm or refute some preliminary hypotheses, thereby giving a comparative assessment of the impact of various factors on the optimisation parameters.

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A priori ranking of production factors has the following steps (Imasheva et al., 2011, p.85):

- calculating the raw data;
- calculating the sum of the ranks ($\sum_{i=1}^{m} aj$);
- calculating the difference of the sums of each factor and the average sum of the ranks (Δ_i) and the sum of the squares of variance (S):

$$\Delta i = \sum_{i=1}^{m} aj - \frac{\sum_{j=1}^{n} \sum_{i=1}^{m} aj}{n} \qquad (1)$$

$$S = \sum_{i=1}^{m} (\Delta i) \qquad (2)$$

Where "aj" is the rank of each i-th factor in j-th respondent;

m-number of respondents;

n-number of factors;

assessing the consistency of all respondents' opinions is (determining the coefficient of concordance ω):

$$\omega = \frac{12S}{m^2(n^3 - n) - m\sum_{1}^{m} Tj} \qquad (3)$$

$$Tj = \sum(t^3 - tj) \qquad (4)$$

Where it is the number of corresponding ranks in the j-th ranking.

If the value of the concordance coefficient is much different from zero, it can be said that there is an enormous relationship between the opinions of respondents (Imasheva et al., 2011, p.86). This coefficient of concordance can only be applied after assessing its significance, which can only be determined by x^2-criterion. It is calculated as follows:

$$x^2 = \frac{12S}{m(n+1) + \frac{1}{n-1}\sum_{1}^{m} Tj} \qquad (5)$$

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Verification of this hypothesis of respondents' unity of opinion can be confirmed if, for a given number of degrees of independence, the table value x^2- is lower than the calculated for 5% of the tabular level of verification (Imasheva et al., 2011, p.86).

Table 1. Values x^2-relevant tolerance values $\alpha = P\{x^{2(k)>}|x^2a\}$

k	α					
	0,990,99	0,95	0,90	0,10	0,05	0,01
1	2	3	4	5	6	7
1	0,0002	0,004	0,02	2,71	3,84	6,64
2	0,02	0,10	0,21	4,61	5,99	9,21
3	0,12	0,35	0,58	6,25	7,82	11,34
4	0,30	0,71	1,06	7,78	9,49	13,28
5	0,55	1,15	1,61	9,24	11,07	15,09
6	0,87	1,64	2,20	10,65	12,59	16,81
7	1,24	2,17	2,83	12,02	14,06	18,48
8	1,65	2,73	3,49	13,36	15,51	20,09
9	2,09	3,33	4,17	14,68	16,92	21,67
10	2,56	3,94	4,87	15,99	18,31	23,21
11	3,05	4,58	5,58	17,28	19,68	24,72
12	3,57	5,23	6,30	18,55	21,03	26,22
13	4,11	5,89	7,04	19,81	22,36	27,68
14	4,66	6,57	7,79	21,06	23,69	29,14
15	5,23	7,26	8,55	22,31	25,00	30,58
16	5,81	7,96	9,31	23,54	26,30	32,00
17	6,41	8,67	10,09	24,77	27,59	33,41

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18	7,02	9,39	10,86	25,99	28,87	34,81
19	7,63	10,12	11,65	27,20	30,14	36,19
20	8,26	10,85	12,44	28,41	31,41	37,57
21	8,90	11,59	13,24	29,62	32,67	38,93
22	9,54	12,34	14,04	30,81	33,92	40,29
23	10,20	13,09	14,85	32,01	35,17	41,64
24	10,86	13,85	15,66	33,19	36,42	43,98
25	11,52	14,61	16,47	34,38	37,65	44,31
26	12,20	15,37	17,29	35,56	38,89	45,64
27	12,88	16,15	18,11	36,74	40,11	46,96
28	13,56	16,93	18,94	37,92	41,34	48,28
29	14,26	17,71	19,77	39,09	42,56	49,59

Continuation of table 1

30	14,95	18,49	20,60	40,26	43,77	50,89
40	22,16	26,51	29,05	51,81	55,76	63,69
50	29,71	34,76	37,69	63,17	67,51	76,15
100	70,07	77,93	82,36	118,50	124,34	135,81
Note: compiled according to Imasheva et al. (2011, p.87).						

*Ranking chart *construction.*

As a result of the calculations, the tabulated value of the x^2 criterion is lower than the calculated one, which means 95% confidence that respondents' opinion about the degree of influence of factors is in conformity with, first of all, the coefficient of concordance ω (Imasheva et al., p.88, 2011). Having given a value of concordance to all respondents, it is necessary to construct an average ranking diagram, plotting on the x-axis the factors and on the y-axis the corresponding sums of ranks. The

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lower the sum of ranks of a given factor, the higher its place in the chart. This diagram will be used to assess the significance of factors (Imasheva et al., p.88, 2011).

If the event is not uniformly exponentially decreasing, then a certain proportion of the factors can be excluded from further study. If the event is uniform, then all factors can be included in the experimental study. This ranking diagram can be used to identify the most influential factors and to remove factors that have a negligible minimum impact.

In cases with a very large number of factors, in addition to the overall unity of the respondents' opinions, determine by x^2 −distribution and unity for each factor individually (Imasheva et al., 2011, p.88).

Table 2. Ranking of production factors by significance of impact on employees in workshop No. 5 of AZKhS JSC

Respondent (m)	Ranking by factor							Average sum of ranks and sum of squares of deviations	Tj
	Harmful chemicals and substances	Tension Labour	Vibration	The complexity of the work to be done	Micro Team climate	Illuminated by availability	Noise		
1	1	2	3	4	5	6	7		
2	3	5	4	1	2	6,5	6,5		6
3	2	6	7	4	1	3	5		
4	2	5	7	4,5	4,5	3	1		6
5	2	7	4	6	5,5	5,5	3		6
6	1	2	7	5	4	3	6		
Sum of ranks	11	29	36	26,5	19	24	26,5	24,571428	18
Δi	-13,571	4,429	11,429	1,929	-5,571	-0,571	1,929		
Δi^2	184,184	19,612	130,612	3,719	31,041	0,327	3,719	373,214	
Specific value x^2-criterion	13,44916345								
Note-compiled by the author from (Imasheva et al. (2011, p.88).									

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Considering the above method of a priori ranking of factors, it is possible to identify factors that do not have a significant impact on the parameter under study, these factors can be excluded from the study (Imasheva et al., 2011, p.88).

Using the methodology used above, a ranking of production factors was determined at JSC "Aktobe Chromium Compounds Plant" in the shops where chromium anhydride and chromium oxide are produced in the Table 2 (Imasheva et al., 2011, p.88).

Findings and Discussion

By calculating the values Δi for each of the factors of workshop No.5, the degree of unity of the respondents' opinions is determined (Imasheva et al., p.89, 2011). To do this, the coefficient of concordance of opinions of respondents surveyed is applied ωwhich in this case has been calculated and is equal to 0.37, i.e. different from zero. Therefore, we can say that there is a correlation between the opinions of respondents. Therefore, the researchers do not identify the factors in the same way (the value of the concordance coefficient found ω is different from zero). The significance of ω can be calculated using the x^2-criterion. The calculated tabular value of x^2-with a=0.05 and number of degrees of freedom f=7-1=6 is 12.59 [20, p.89]. Therefore at a given number of degrees of freedom the calculated value is lower than the calculated value for 5% level of significance (12,59<13,45). Thus, we can say with 95-% confidence that the respondents' opinion on the degree of influence of factors goes in accordance with the coefficient of concordance $\omega = 0,37$.

All this will make it possible to construct an average a priori ranking diagram for the factors under study.

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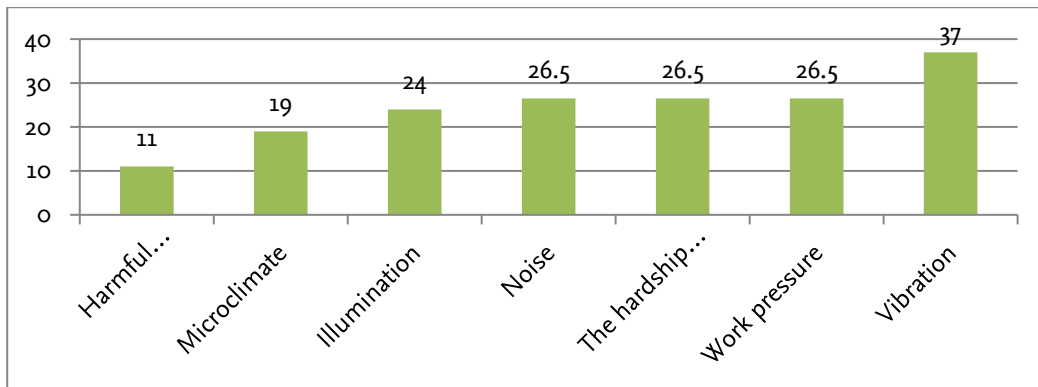Kuralay Nurgalieva, Leila Mardenova, Anel Usenova

Figure 2 - Distribution of production factors in workshop no. 5

for the production of chromium anhydride pigment chromium oxide JSC AZKhS
Note-compiled by the author from Imasheva et al. (2011, p.89).

As can be seen from this diagram, the first place is occupied by harmful substances (sum of ranks 11), which have the greatest impact; the second is microclimate (19), then light (24), then noise and heaviness of work, all having the same degree of impact (26.5 each); next are work stress (29) and vibration (36) (Imasheva et al., 2011, p.89).

Indeed, as a result of measurements of harmful factors of production at the workplaces of the main professions of workers of the petrochemical plants, it was determined that the average concentration of harmful substances Cr+6 exceeds the maximum permissible values by 2 times, the microclimate indicators - the temperature of the working environment during the warm periods exceeds the standard values by 5-7^{0}C, relative humidity and air velocity less than the normative values, lighting indicators below the required value (Imasheva et al., 2011, p.89).

Conclusion

Thus, of the methodologies we have considered for assessing occupational risks, the methodology for ranking harmful factors of production and work process is the most acceptable. It can be used in determining the harmful factors of exposure in the production process and for any industry, not only in the petrochemical industry.

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In addition, it is effective in developing a set of preventive measures and measures to reduce risks at work.

In addition, we recommend the use of these techniques in the outsourcing of occupational health and safety systems.

The methodologies considered for assessing occupational risks can be recommended for the establishment of laboratories and systems for studying occupational risk assessment in the healthcare system of Kazakhstan.

References

1. Alexander, D. D., Mink, P. J., Adami, H. O., Chang, E. T., Cole, P., Mandel, J. S., & Trichopoulos, D. (2007). The non-Hodgkin lymphomas: A review of the epidemiologic literature. International Journal of Cancer, 120(S12), 1–39. https://doi.org/10.1002/ijc.22719

2. Barabási, A. L. (2007). Network Medicine — From Obesity to the "Diseasome." New England Journal of Medicine, 357(4), 404–407. https://doi.org/10.1056/nejme078114

3. Bernardet, C., Bonneterre, V., Bicout, D., Larabi, L., & de Gaudemaris, R. (2007). Analyse temporelle des couples nuisance/pathologie principale relevant des maladies professionnelles au sein du Réseau National de Vigilance et de Prévention des Pathologies Professionnelles (RNV3P). Archives Des Maladies Professionnelles et de l'Environnement, 68(5), 438–444. https://doi.org/10.1016/s1775-8785(07)78215-2

4. Bonneterre, V., Bicout, D. J., Larabi, L., Bernardet, C., Maitre, A., Tubert-Bitter, P., & de Gaudemaris, R. (2008). Detection of emerging diseases in occupational health: usefulness and limitations of the application of pharmacosurveillance methods to the database of the French national occupational disease surveillance and prevention network (RNV3P). Occupational and Environmental Medicine, 65(1), 32–37. https://doi.org/10.1136/oem.2007.033183

5. Bonneterre, V., Faisandier, L., Bicout, D., Bernardet, C., Piollat, J., Ameille, J., de Claviere, C., Aptel, M., Lasfargues, G., & de Gaudemaris, R. (2009).

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Programmed health surveillance and detection of emerging diseases in occupational health: contribution of the French national occupational disease surveillance and prevention network (RNV3P). Occupational and Environmental Medicine, 67(3), 178–186. https://doi.org/10.1136/oem.2008.044610

6. Cooper, M., & Phillips, R. (2004). Exploratory analysis of the safety climate and safety behavior relationship. Journal of Safety Research, 35(5), 497–512. https://doi.org/10.1016/j.jsr.2004.08.004

7. Dabbagh, R., & Yousefi, S. (2019). A hybrid decision-making approach based on FCM and MOORA for occupational health and safety risk analysis. Journal of safety research, 71, 111-123.

8. Fabbro-Peray, P., Daures, J. P., & Rossi, J. F. (2001). Environmental risk factors for non-Hodgkin's lymphoma: A population-based case-control study in Languedoc-Roussillon, France. Cancer Causes and Control, 12(3), 201–212. https://doi.org/10.1023/a:1011274922701

9. Faisandier, L., Bonneterre, V., de Gaudemaris, R., & Bicout, D. J. (2011). Occupational exposome: A network-based approach for characterizing Occupational Health Problems. Journal of Biomedical Informatics, 44(4), 545–552. https://doi.org/10.1016/j.jbi.2011.02.010

10. Gibson, J. H., & Wayne, N. L. (2013). Proceedings of the 2012 University of California Center for Laboratory Safety Workshop. Journal of Chemical Health & Safety, 20(1), 4–17. https://doi.org/10.1016/j.jchas.2012.10.002

11. Gibson, J. H., Schröder, I., & Wayne, N. L. (2014). A research university's rapid response to a fatal chemistry accident: Safety changes and outcomes. Journal of Chemical Health & Safety, 21(4), 18–26. https://doi.org/10.1016/j.jchas.2014.01.003

12. Goh, K. I., Cusick, M. E., Valle, D., Childs, B., Vidal, M., & Barabási, A. L. (2007). The human disease network. Proceedings of the National Academy of Sciences, 104(21), 8685–8690. https://doi.org/10.1073/pnas.0701361104

13. Imasheva, A., Nurgalieva, A. & Alpysbaeva, Zh. (2011). Ranzhirovanie neblagoprijatnyh proizvodstvennyh faktorov. Қазақstanda Еңбекti Қorғau. Ohrana Truda. Kazakhstan, 6, 84–89. http://elib.kstu.kz/

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of the Chemical and Petrochemical Industry of Kazakhstan
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14. International Labour Organization. (2014, April). Ohrana truda pri ispol'zovanii himicheskih veshhestv na rabochih mestah. Moskva: MOT. https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---sro-moscow/documents/genericdocument/wcms_312003.pdf

15. Jones, C. G. (2005). A REVIEW OF THE HISTORY OF U.S. RADIATION PROTECTION REGULATIONS, RECOMMENDATIONS, AND STANDARDS. Health Physics, 88(6), 697–716. https://doi.org/10.1097/01.hp.0000146629.45823.da

16. Kucheneva, E. E. (2009). Prognozirovanie professional'nogo riska i razrabotka sistemy upravlenija im na potencial'no opasnyh promyshlennyh ob#ektah. Minsk.

17. Kvidzha Al'-Dalemi, Ju. M. (2013). Ocenka professional'nogo riska na neftehimicheskom predprijatii (No. 13). Polockij gosudarstvennyj universitet. https://elib.psu.by/handle/123456789/1133

18. Muller, A. M. S., Ihorst, G., Mertelsmann, R., & Engelhardt, M. (2004). Epidemiology of non-Hodgkin's lymphoma (NHL): trends, geographic distribution, and etiology. Annals of Hematology, 84(1), 1–12. https://doi.org/10.1007/s00277-004-0939-7

19. Rana, I., Dahlberg, S., Steinmaus, C., & Zhang, L. (2021). Benzene exposure and non-Hodgkin lymphoma: a systematic review and meta-analysis of human studies. The Lancet Planetary Health, 5(9), e633-e643

20. Vermeulen, R., Schymanski, E. L., Barabási, A. L., & Miller, G. W. (2020). The exposome and health: Where chemistry meets biology. Science (New York, N.Y.), 367(6476), 392–396. https://doi.org/10.1126/science.aay3164

21. Viel, J. F., Arveux, P., Baverel, J., & Cahn, J. Y. (2000). Soft-Tissue Sarcoma and Non-Hodgkin's Lymphoma Clusters around a Municipal Solid Waste Incinerator with High Dioxin Emission Levels. American Journal of Epidemiology, 152(1), 13–19. https://doi.org/10.1093/aje/152.1.13

22. Walsh, L., Turner, S., Lines, S., Hussey, L., Chen, Y., & Agius, R. (2005). The incidence of work-related illness in the UK health and social work sector: The Health and Occupation Reporting network 2002–2003. Occupational Medicine, 55(4), 262–267. https://doi.org/10.1093/occmed/kqi127

Development of Measures to Amend the Labour Protection Regulations
of the Chemical and Petrochemical Industry of Kazakhstan
Kuralay Nurgalieva, Leila Mardenova, Anel Usenova

23. Wild, C. P. (2005). Complementing the Genome with an "Exposome": The Outstanding Challenge of Environmental Exposure Measurement in Molecular Epidemiology. Cancer Epidemiology Biomarkers & Prevention, 14(8), 1847–1850. https://doi.org/10.1158/1055-9965.epi-05-0456

24. Yousefi, S., Jahangoshai Rezaee, M., & Moradi, A. (2020). Causal effect analysis of logistics processes risks in manufacturing industries using sequential multi-stage fuzzy cognitive map: a case study. International Journal of Computer Integrated Manufacturing, 33(10-11), 1055-1075.

25. Zheng, F., Gonçalves, F. M., Abiko, Y., Li, H., Kumagai, Y., & Aschner, M. (2020). Redox toxicology of environmental chemicals causing oxidative stress. Redox biology, 34, 101475.

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Migration Processes of Labor Resources in the Regions of Kazakhstan within the EEU

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Abstract

The article is aimed to analyze the migration process of labor resources taking place in the regions of Kazakhstan within the Eurasian Economic Union (EEU) conditions. Comparative analysis of international labor migration theories and their relation to the migration process in the regions of Kazakhstan were outlined in the paper. Moreover, a comparative analysis of the dynamics of internal and external migration in the Republic of Kazakhstan and its regions was carried out. The study justified the ways to decelerate the negative dynamics of population migration in the context of the EEU. According to the results of the analysis, the largest number of migrants migrated from Turkestan, Almaty, and East Kazakhstan regions in recent years. Furthermore, Zhambyl and Karaganda regions are among five regions with recorded negative migration balances. These trends reflect the current demographic and economic security issues of the country, especially in regions with a sharply declining population. Therefore, it is essential to control the flow and pace of migration, the direction of migration, by improving the living conditions of the population and providing employment in distant regions.

Keywords: migration of labor resources, EEU, labor market, unemployment, foreign labor force, regional development.

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Introduction

In the context of the EEU, the processes of labor migration are considered the most relevant issues. Labor migration plays an important role in analyzing the quantity and quality of labor in the country and is related to socio-economic problems, such as unemployment in the regions. In this regard, the purpose of the study is to determine the impact of migration processes in the regions of Kazakhstan on the labor market in the context of Eurasian integration. The objectives of the study are as follows: to conduct a statistical analysis of the internal and external migration process of labor resources in the regions of Kazakhstan within the EEU; to justify the factors affecting labor migration in the regions; and to conduct a comparative analysis of its impact on the labor market in the regions, as well as to propose ways to reduce its negative consequences.

Literature Review

Migration always played an important role in the formation of the population, respectively, in the labor market of individual countries and territories. Since the second half of the XIX century, there were fundamental changes in the nature and direction of migration flows. Currently, there is no single, coherent theory of migration. Existing theories have been developed mainly independently from each other and describe a number of aspects of migration. Nevertheless, these theories contribute to the understanding of current migration processes and their impact on the labor market. The main concepts of the main theoretical directions of labor migration are presented in Table 1.

Table 1. The main theoretical directions of the labor migration process

Representatives of the theory	Brief description of theories
	Ravenstein's migration laws
Ravenstein, the 80s of the XIX century	1. redistribution of the population between territories.
	2. territories differ mainly in their economic characteristics.
	3. most migrants migrate short distances.
	4. migration occurs in stages.

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	5. each migration flow corresponds to the reverse flow.
	6. remote migrants migrate to large industrial and commercial centers.
	7. urban residents are less mobile than rural residents.
	8. women are more mobile than men in intra-country movements, men are more mobile than women in long-distance movements.
	9. large cities increase mainly due to migration.
	10. the volume of migration increases with the development of industry, trade, and transport.
	11. one of the main reasons for Migration is economic reasons.
E. Lee's push and pull factors	
Li, 1966	Push factors: some factors of an economic nature (unemployment, low income, high taxes) can be characterized as push factors; social and political (poverty, discrimination, restrictions on freedom of conscience and religion, war); unfavorable environmental and climatic conditions, etc.
	Pull factors: a high level of economic development, high income, security, the ability to access the labor market (including in the informal sector, which is important for illegal immigrants), and others.
	Intermediate factors: transport costs, legal regulation of movements, availability of information about the planned arrival area, etc.
	Personal factors: personal decision factors that contribute to or hinder migration.
Neoclassical theory of migration: micro and macro level	
Friedman, Samuelson, et al., 1960-1970, Todaro, Maruzhko	The main conceptual assumptions of this theory at the macro level are:
	1. international labor migration is caused by the difference in wages between countries.
	2. after the elimination of wage differences on a global scale, the labor force will cease to exist.
	3. human capital flows, in the case of highly skilled and low-skilled labor, can go in different directions under the influence of different driving forces affecting these processes.
	4. the labor market is the main mechanism by which international labor flows arise. Other types of markets are much less affected.
	5. national governments can manage migration flows mainly by influencing the labor markets of the sending or receiving countries.

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	According to the microeconomic model of personal choice (M. Todaro, L. Maruzhko), individual rational individuals make decisions about moving based on the analysis of costs and income associated with moving. One of the main components is the assessment of the expected benefits of the income deficit. International migration is understood as a form of investment in human capital.
Piore's theory of the dual labor market	
Piore, the 70s of the XX century	1. international labor migration is based on the demand of employers in developed countries. 2. since the demand for migrants is formed due to the structural needs of the economy, the level of wages is not a condition for labor migration, so employers can hire workers without raising wages. 3. low wages in host countries do not increase in response to reduced immigrants. 4. low wages in host countries may decrease due to an increase in the number of immigrants. 5. the state's ability to influence international migration is low, and significant changes in the economy affect the demand for immigrant labor.
Wallerstein's theory of the world system	
Wallerstein, 1970-1990	1. international migration is a consequence of the formation of a capitalist market in developing countries. 2. International Labor flows correspond to international flows of goods and capital, but vice versa. 3. international migration is typical for former colonial powers and their former colonies. 4. international labor migration is associated with the globalization of the market economy; it allows governments to influence the level of immigration by regulating the foreign investment activities of corporations. 5. due to the political and military intervention of the governments of capitalist countries to protect investments abroad, another form of international migration may occur-refugees. 6. as a result, international migration has nothing to do with the difference in wages and employment rates between different countries, it is caused by the dynamics of market creation and the structure of the world economy.

Note: compiled on the literature review (Melkonyan, 2015; Abylkalikov & Vinnik, 2012; Massey et al., 1993; Lee, 1966; Ravenstein, 1989).

Classical theories of migration are used to identify socioeconomic, demographic, and other problems in the development of individual regions and countries. These theories are viewed as a theoretical basis for identifying the causes of labor migration in the Republic of Kazakhstan and its regions within the EEU and analyzing its impact on the labor market of the regions. The study of the current labor migration processes in Kazakhstan is based on Ravenstein's theory of migration laws, Lee's push/pull factors theory, and the neoclassical theory of macro/micro level. First, according to Ravenstein's migration laws, large cities increase mainly due to migration: Almaty, Nur-Sultan, and Shymkent. Secondly, the volume of migration increases with the development of industry, trade, and transport. Third, one of the main reasons for migration is economic reasons: the optimal state of the labor market and a high level of wages. According to Lee's theory, the pull factors of migration in Kazakhstan are common for the following regions: West Kazakhstan, South Kazakhstan regions, and large megacities. The push factors (unemployment, low income, unfavorable environmental and climatic conditions) are common in the eastern, northern, and central regions of the country.

Currently, there is a certain disparity in the socio-economic development of the regions of Kazakhstan. In several regions, there is a trend of rapid and stable positive dynamics of development. Whereas in other regions, there is a long-term stagnation in the development of the economy (Sal`zhanova & Gelashvili, 2017). Such differences in the development of regions have a significant impact on the quantity and quality of the labor force and its migration processes.

Methods

The methodological foundation of the study is foreign and domestic works in the field of international labor migration and the labor market. Following research methods are used: theoretical method, statistical analysis, comparison,

classification, and logical method. This set of methods is used to identify the essence of labor migration processes, to outline the specifics of development in the context of integration and its impact on the labor market in a particular region and country.

Findings and discussion

International migration in the Eurasian Economic Union is one of the main factors for ensuring sustainable socio-economic and demographic development of the EEU member states.

Currently, the importance of the demographic potential increase is recognized by all member states of the Union. Each member country pursues a policy to maintain demographic security and increase the standard of living and life expectancy. This policy, as a rule, is reflected in various programs, projects, and national security strategies adopted by the EEU countries, considering their own priorities (Osadchaya & Vartanova, 2021). On the one hand, migration compensates for demographic losses and reduces the burden on the social protection system of the Union countries, which are at risk of depopulation and shortage of labor resources. On the other hand, migration enables the maintenance of political and socio-economic stability in countries with high rates of natural population growth and overworking. In this regard, the development of common approaches to regulating migration processes in the EEU and the formation of a common labor market, the removal of barriers to the movement of goods, services, and capital became an important achievement of the Eurasian integration process (Gayeva, 2019).

The EEU treaty established a number of basic rules aimed at ensuring freedom of movement of labor resources on the territory of the Union. The created conditions are an additional incentive for the labor activities' legalization of citizens in the territory of the member states of the Union. These conditions assist to form a single labor market on the EEU territory. Citizens of the member states do not need to pass exams for knowledge of the language, legislation, and history of the state of employment in order to obtain a work permit, as well as to conduct additional procedures for recognizing educational documents for many professions. In

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addition, employees have the opportunity to work in accordance with employment and a civil law contract, which significantly expands the scope of their employment (Inform KZ, 2021). Despite the conditions under the agreement, it is complicated to claim that a single labor market successfully operates in the EEU countries. Currently, the negative impact of the geopolitical situation with Russia's participation and other economic factors on labor migration increases.

The project named "Unified search system" Work without borders "was launched in September of 2019, by the decision of the Council of the Eurasian Economic Commission. On July 1, 2021, it was put into commercial operation. The project is a search engine for accessing information about vacancies and job seekers, the engine contains the national information systems of the EEU countries in the field of employment. The "Work without borders" project allows Kazakhstan citizens and EEU residents to find a job within the organization. Employers of the member states, therefore, receive an additional, verified source of "hunting". Thus, the member states contribute to ensuring the mobility of labor resources, as well as the development of remote recruitment within the Union. The project includes the existing national systems of five countries: "Electronic Labor Exchange" (Kazakhstan), "Gorts" (Armenian), the information portal of the state employment service (Belarus), "Employment" (Kyrgyzstan),"Work in Russia" (Workforce Development Centre, 2021).

Based on the analysis of migration processes in the EEU, the following features are identified (Gayeva, 2019):

- Dominance of labor migration flows over a long-term period corresponding to the distribution of migration flows for the purposes of entry into the post-soviet territory: labor migration is more intensive than long-term migration.
- Uneven distribution of temporary and long-term migration flows. Most migrants move to Russia, and migration exchanges between other member countries in the EEU are insignificantly or practically absent. At the same time, the migration attractiveness of Kazakhstan for labor migrants from Kyrgyzstan and Russia gradually increases, although Kazakhstan gives way to Russia in terms of the number of labor migrants from the member states of the EEU.

- The largest flows of labor migration to the main host countries, Russia and Kazakhstan, come from outside the EEU migration subsystem, in particular from Uzbekistan.
- The main source of labor migration is Kyrgyzstan, where citizens make up 47% of the total influx of labor migration within the EEU. The main source of long-term immigration is Kazakhstan, where citizens make up 44% of the total immigration flow.
- The common interethnic language and historically developed close economic, cultural, political relations have a positive impact on the dynamics and intensity of migration exchange between the EAEU member states.
- Common interest in migration and the inhomogeneity of their socio-economic and demographic development.

In turn, the labor market of Kazakhstan faced an outflow of skilled labor. In particular, highly qualified specialists were attracted by foreign countries since 2015.

The problems of the national labor market of the Republic of Kazakhstan within the EEU include the following: increasingly, Kazakhstan citizens are engaged in inefficient activities in the Russian market; low level of employment in high-tech and knowledge-intensive industries; a decrease in qualification skills level of the population due to the inability of the implementation in practice; a large number of illegal labor migrants; an absence of the unified digital database on the employment of citizens of the EEU (Tuleibaeva, 2021).

It is important to pay attention to the results of statistical analysis of the migration process of labor resources in Kazakhstan since 2015. Due to the absence of the official statistics for 2021, the dynamics of Population migration in Kazakhstan for 2015-2020 are depicted in Table 2 and Figure 1, respectively.

Table 2. External migration flow of the population of the Republic of Kazakhstan in 2015-2020, in thousands of people

	2015	2016	2017	2018	2019	2020
Number of arrivals	16,6	13,8	15,6	12,7	12,3	11,3

Number of departures	30	35	37,7	41,9	45,2	29,1
External migration net	-13,4	-21,2	-22,1	-29,2	-32,9	-17,8

Note: compiled on the basis of data from the National Bureau of Statistics
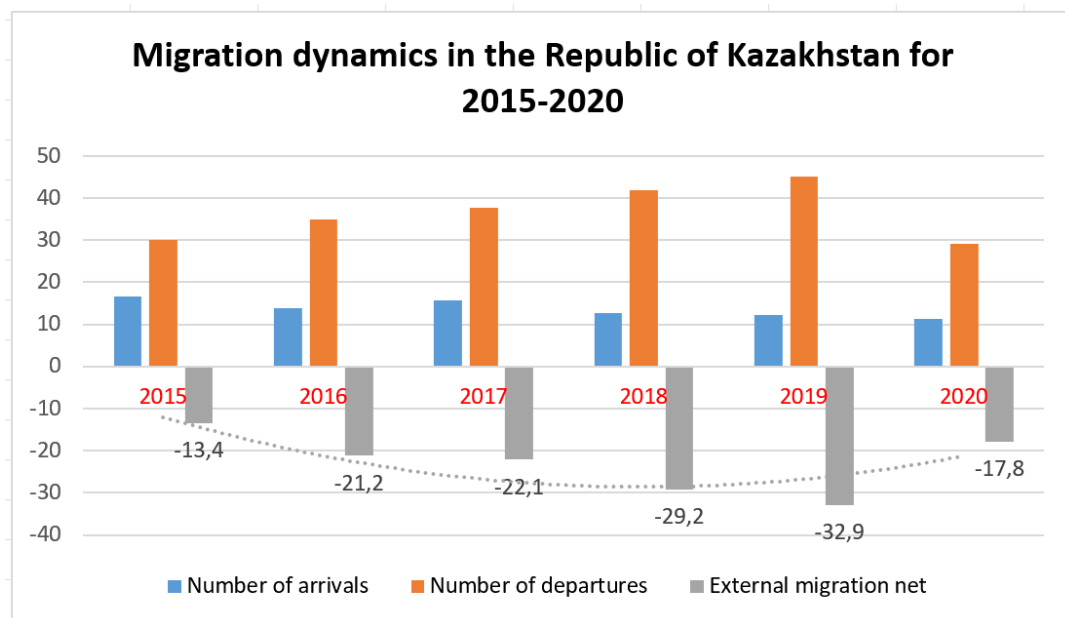

Figure 1. Migration dynamics in the Republic of Kazakhstan for 2015-2020, thousand people

According to statistics, in Kazakhstan, the number of people who left the country increases at a progressive rate every year since 2015 compared to the number of people who moved to the country. As a result, there is a negative balance of Population migration. Especially in 2018-2019, the number of migrants abroad increased sharply. In 2020, there was a significant decrease in the number of departures abroad. As a rule, immigrants to a foreign country are qualified specialists and the main share of them is city residents. Most of them are specialists in the technical, economic, and pedagogical spheres. Most of the immigrants who enter Kazakhstan are low-skilled and focused on agriculture and construction.

Among Kazakhstan citizens, there was a negative balance of external migration between the age of 16 and retirement age, i.e. 17.4 thousand people (23.6 thousand people left, 6.2 thousand people arrived) in 2019. The negative balance of migration of children under the age of 15 amounted to 8 thousand people (9.1 thousand people left, 1.1 thousand people arrived). The largest number of people moved to

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Russia: 30.4 thousand people left in September 2019. The number of immigrants in Russia was 2,2 thousand people. The second appealing country for migrants from Kazakhstan is Germany, where the number of migrants is 2.1 thousand people. The top three countries are Belarus, which is home to 297 Kazakhstanis. The five also include Uzbekistan (220 people left) and the United States (190 people left). Kazakhstanis often migrate to Kyrgyzstan, Israel, China, Turkey, and Canada. Most of the settlers in Kazakhstan came from Uzbekistan (2.9 thousand people), Russia (2.2 thousand people), and China (686 people) (Ranking KZ, 2019).

Over the past five years, CIS countries have been considered as the main directions of emigration. Notably, 144.4 thousand people (89% of the total number of emigrants) have left. Mostly, representatives of technical, economic, and pedagogical specialties left the country. In 2020, according to the quota, 14 thousand foreign workers were attracted to Kazakhstan. The number decreased by 1.9 thousand people compared to 2019. Citizens from 104 countries worked on the territory of the country, the largest number of citizens were attracted from China, Turkey, and India. The leading attraction region is the Atyrau region. According to the results of 2020, there are more than 40% of the FDI. In terms of profession, engineers are the most relevant followed by foreign specialists (Workforce Development Centre, 2021).

The coronavirus pandemic also had a significant impact on labor migration. In the context of the pandemic, high prices for air tickets and expensive working patents in Russia forced migrants from Central Asian countries to search for work in Kazakhstan. At the same time, Kazakhstan is agreed to accept a foreign labor force. Especially, considering the fact that the foreign labor force is eager to have the heavy work compared to locals. For example, in May 2020, the authorities of the Atyrau region (the West of the country) brought 600 people from Uzbekistan to employ in the agricultural sector. Atyrau region, like other regions of Kazakhstan, faced a labor shortage in 2020, when borders were closed due to a pandemic and migrants could not enter the country (Nadzhibulla, 2021).

The dynamics of interregional migration in Kazakhstan in 2015-2021 is presented in Figure 2.

The volume of interregional migration in the Republic of Kazakhstan in 2015-2021, thousand people
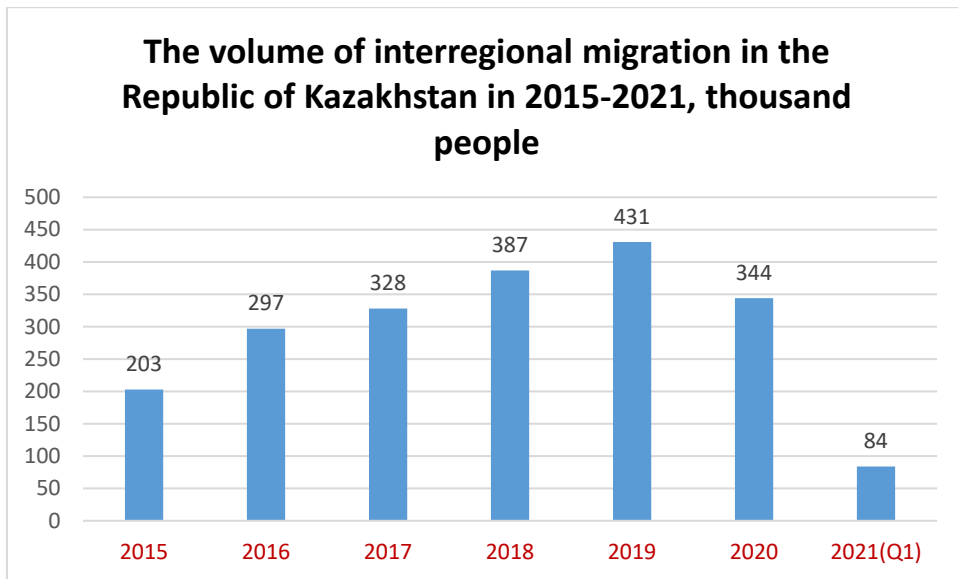
Figure 2. The volume of interregional migration in the Republic of Kazakhstan for 2015-2021, thousand people (Annual report of WDC, 2021)

In general, the main regions of departure across the country are the southern regions. On the one hand, this is due to the fact that the southern regions are historically characterized by the largest number and population density. On the other hand, this trend is partly the result of the ongoing government policy to stimulate resettlement from labor surplus to labor-deficient regions.

Within the framework of the state program "Enbek" for 2017-2020, approximately 26 thousand people were involved. Among these people, 13 thousand people are characterized as a labor force. Almaty, Zhambyl, Kyzylorda, Mangistau, and Turkestan regions are defined as donors of labor, whereas East Kazakhstan, North Kazakhstan, Kostanay and Pavlodar regions are defined as regions for receiving immigrants. State support for voluntary inter-regional resettlement includes reimbursement of displaced housing and communal services, financial assistance for relocation, assistance in retraining, employment and starting a business, providing subsidies to employers assisting in resettlement (Workforce Development Centre, 2021).

There is a visible disparity in the migration situation in the regions of Kazakhstan. The migration balance of the regions for 2020 is shown in Figure 3.
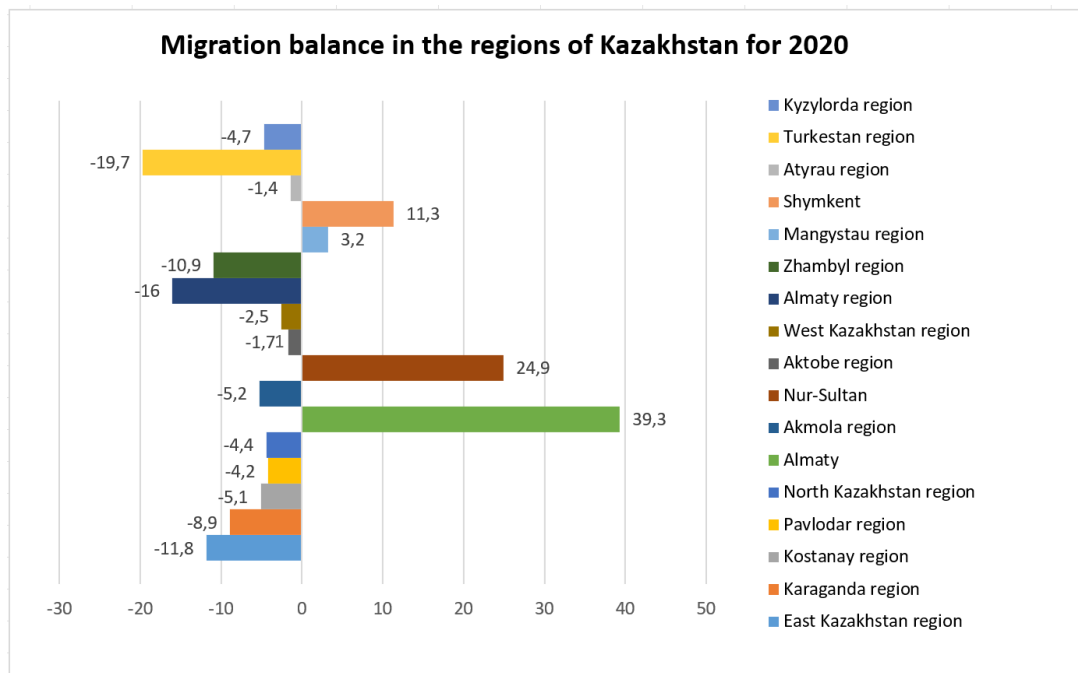
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Figure 3 - Migration balance in the regions of Kazakhstan for 2020, thousand people

Note: compiled on the basis of data from the National Bureau of Statistics

In the regional context, the largest number of migrants migrated from the Turkestan region, Almaty and East Kazakhstan regions. Zhambyl and Karaganda regions are also among the five most populous regions. The leader in terms of population migration is Almaty city, followed by Nur-Sultan and Shymkent. It means that the process of urbanization develops rapidly. This trend, on the other hand, leads to a disparity in the concentration of the population in the country and increases the economic and social burden for large cities. Along with major cities, a positive migration balance is recorded in the Mangystau region. Mangystau region ranks second after the Atyrau region in terms of per capita nominal monetary income (141,506 tenge – 2020). The region has a high industrial, transit, and tourist potential.

Among the regions with a negative balance, East Kazakhstan, Karaganda, Pavlodar, and Kostanay regions belong to the third group of socio-economic development. These regions are rich in natural mineral resources. The main industries: mining and processing industries are local raw materials, as well as mechanical

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engineering, light, and food industries. Regional programs for the development of the second and third groups of regions are aimed at the diversification of industrial production mainly in industrial areas, the development of entrepreneurship in agriculture, the development of transport and communication infrastructure (Temirova & Abdimomy`nova, 2016).

According to the Speech "New Kazakhstan: the way of renewal and modernization" of the President of the RK, K.Tokayev on March 16, 2022, it was proposed to introduce the following reforms in the administrative-territorial structure of the state: the division of the East Kazakhstan region into two parts and the creation of a new Abay region (Center – Semey); the division of the Karaganda region into two parts and the creation of a new Ulytau region (Center – Zhezkazgan); the division of the Almaty region into two parts - Zhetysu (Center - Taldykorgan) and Almaty regions (Center - Kapshagai). These changes would provide a new impulse to the development of the relevant regions, in particular, infrastructure development, production activation, and the creation of new jobs. These conditions would reduce the problem of unemployment and contribute to the attraction of labor resources.

The problem of unemployment is closely related to labor migration. According to a study by Finprom.kz, in the first quarter of 2021, the unemployment rate was 4.5% in the Karaganda region, 5.2% in the Turkestan region and Almaty. In 2020, the unemployment rate was 5.1% in Almaty, and 5% in the Turkestan region. The number of unemployed people in the Turkestan region increased by 2.3%, (42.6 thousand people), in Almaty - by 3.4%, (53.2 thousand people) (Strategy2050.kz, 2021). By territorial division, the main share of unemployed people (58%) lives in cities of Kazakhstan, the rest (42%) - in rural areas. The urban labor force has increased by 742.3 thousand people since 2010, making up 57% of the total economically active population. At the same time, the number of labor forces in rural areas has decreased by more than 183.6 thousand people or 4.5% over ten years (Zholdaskyzy, 2019). That is, the process of urbanization in Kazakhstan is accompanied by an increase in the labor force in cities, as well as an increase in migration flows from rural to urban areas and an increase in the total number of unemployed people in the structure of the urban population.

Youth unemployment differs significantly by region. According to the NEET index (15-28 years), Karaganda, Turkestan, and North Kazakhstan regions have a high level of youth unemployment (Musaripova, 2018). Taking into account the scale of the territory of Kazakhstan and the unbalanced concentration of the population, these trends indicate topical issues of demographic and economic security of the country, especially in regions where the population is sharply declining. Therefore, it is very important to control the flow and pace of migration, the direction of migration, by improving the living conditions of the population and providing employment in remote regions.

According to the Statistics Committee on employment in 2018 of the Ministry of the national economy of the RK, numerous factors affecting the difficulties in finding a job or the causes of unemployment were identified. Among the most important causes of unemployment in Kazakhstan are voluntary dismissal (23%); impossibility to find a job (22.5%); family reasons (11%).
Voluntarily, they work mainly in the northern regions. This is due to the observed trend of internal and external migration. The main departure countries are Russia and countries outside the CIS (especially Germany, USA). The negative balance prevails in the north-eastern and central regions of Kazakhstan, regions with a predominance of the Russian population.
There are also several opinions supporting the idea that currently, the country's education system does not provide an adequate level of training for young people for the labor market. There is a significant imbalance between labor and supply.
As a result, it is necessary to note the main reasons for youth unemployment in the labor market of Kazakhstan: the lack of a system for allocating jobs for graduates of higher educational institutions in accordance with the received specialty and the difference between the required specialties in the labor market and the specialties of graduates. For developing countries, one of the main sources of solving youth unemployment is small and medium-sized businesses. In this regard, it is necessary to pay attention to the revitalization of the private sector. It is also necessary to create conditions for long-term trips to regions where there is a shortage of Labor. Thus, in each region, a unique labor market should be formed

under the influence of the sectoral structure of the economy, population density, migration processes, the level of professional training, the activity of enterprises, the activities of the public sector, and various other factors.

In Kazakhstan, at the regional level, there is a tendency to increase the outflow of young people to study outside the country and continue to leave for permanent residence. There is also a high trend of young people moving from rural to urban areas. In this regard, youth unemployment is becoming more relevant. At the same time, currently, in the labor market of Kazakhstan, there is a large influx of humanitarian specialists and a shortage of technical personnel. Therefore, specialists in the foreign labor force are a temporary alternative solution to quickly meet the needs of enterprises for highly qualified labor.

Pulling factors for the educational migration of Kazakhstani youth can be divided into three groups:

1) Group of economic factors. Educational migration reflects the differentiation of regions in economic and social terms. Kazakhstan has a high unemployment rate, limited employment opportunities, low wages, and a lack of jobs in certain fields. At the same time, there is a higher level of socio-economic development, high living standards (including high-quality medicine and education), a high level of accommodation and comfort of life and social security, wages, fair competition and opportunities for business abroad.

2) The state of the education field. Receiving a high-quality education remains the most effective social lift and is regarded to resolve economic issues. Education obtained abroad enables broader opportunities and allows the establishment of international contacts. A sociological survey conducted as part of the study showed that educational migration turns into labor migration

3) A group of political factors: young people's perception of the political system of their country, the provision of public services in education, healthcare, social protection, and the comparison of these factors with their capabilities (Ledeneva & others, 2021).

Another trend is climate migration. The Groundswell report predicts that by 2050, 216 million people in six regions, including Central Asia, could migrate to other countries. Internal climate migration will increase over the next few decades and accelerate in the second half of this century unless countries reduce global greenhouse gas emissions and build resilience to the current and future impacts of climate change (Forbes, 2021). Climat migration is observed in the harsh regions of Kazakhstan - in the central, eastern, and western regions, and the ecological situation leads to a large outflow of the population from some regions (Semey, Kyzylorda).

In this regard, labor migration in Kazakhstan takes place in two formats:

- official participation of foreign labor force;

- labor migration, coming mainly from Central Asia and Russia, is difficult to assess within the framework of the EEU and is not spontaneous (Analytical report, 2017).

In general, during the observed period, 308.6 thousand foreign labor forces were involved in the production, including the management staff of companies. The main share is made by highly qualified specialists, as they are in demand in the local labor market.

Since 2010, China has been the leader among countries in terms of the number of foreign specialists (31.2% of the foreign labor force). This is due to the construction of the highway that connects Western Europe and Western China. At the same time, the main share in the structure of direct investment between Asian countries is made by China.

Besides China, in the labor market of Kazakhstan, the main cohort of the foreign labor force is citizens of Uzbekistan, Turkey, India, and the United Kingdom.

The reason for this trend is the investment climate of the regions. The investment climate of Kazakhstan is divided into five main territorial divisions: the central-eastern territory (30%), the south-eastern territory (25%), the Northern Territory (18%), the Western territory (16%), and the southern territory (11%). However, the attractiveness of the regions for foreign investment, on the one hand, leads to a

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problem solution of unemployment in the region, and on the other hand to the increase of the labor market by foreign labor.

Thus, from a macroeconomic point of view, immigration provides a number of benefits to the host country. In addition, international labor migration offers certain benefits to the sending country:

- the unemployment rate and the cost of its social services will be reduced;
- citizens working abroad improve the balance of payments;
- business activity will be intensified. Some emigrants return to their country with capital to start their own business.

Whereas the negative consequences of labor emigration include:

- there is a loss of national resources spent on the population.

- there is a brain drain, thereby weakening the national economy and weakening the scientific potential of the country;

- there is an imbalance in the demographic situation.

Conclusion

Overall, the decline in the population can be assessed as a threat to the economic and demographic potential and national security of the region. In particular, it leads to a shortage of new labor resources in the national economy, and, accordingly, to an increase in dependence on foreign labor, and to an increase in interregional disparity. This threat is typical for Turkestan, East Kazakhstan, and North Kazakhstan regions, as well as Karaganda regions, which are primarily peripheral regions of the country.

Therefore, the problem of "brain drain" becomes more relevant since it is accompanied by a decrease in the level of human capital and a decline in labor productivity. The loss of a highly skilled workforce for the country reduces the chances of generating groundbreaking ideas and innovations that could drive technological progress and fuel economic growth.

In conclusion, in order to reduce the negative dynamics of population migration in the conditions of the EEU and its negative impact on the labor market of the regions, it is important to implement a set of measures at the regional and state

levels. Notably, by creating special economic zones for the development of industrial and tourist potential of the regions; by solving issues of infrastructure development of the regions, i.e., transport, public places, facilitating the availability of universities; by improving the investment climate, as well as strengthening legal control and responsibility for the impact of large enterprises on the environmental situation in the regions.

References

1. Aby`Lkalikov, S. I., & Vinnik, M. V. (2012). E`konomicheskie teorii migraczii: Rabochaya sila i ry`nok truda. *Biznes. Obshhestvo. Vlast`*.

2. Analiticheskij otchet «O sostoyanii i razvitii ry`nka truda Respubliki Kazakhstan za 2017». (2017). *AO «CZRTR» MTSZN RK*.

3. Gayeva, A. S. (2019). Migraczionny`e proczessy` na evrazijskom prostranstve. *RSM. 2019*. https://cyberleninka.ru/article/n/migratsionnye-protsessy-na-evraziyskom-prostranstve

4. *Glava gosudarstva vy`stupil s Poslaniem narodu Kazakhstana*. (2022, March 16). Akorda. https://www.akorda.kz/ru/glava-gosudarstva-vystupil-s-poslaniem-narodu-kazahstana-162530

5. *Kak reguliruetsya trudovaya migracziya v EAE`S*. (2021, March 15). Inform KZ. https://www.inform.kz/ru/kak-reguliruetsya-trudovaya-migraciya-v-eaes-rasskazali-v-mintruda-rk_a3764303

6. Ledeneva V.YU., Lomakina O.V., Djunusov A.M., Begasilov B.T. Obrazovatel'naya politika Kazahstana v usloviyah migracii molodyoji // Higher Education in Russia. 2021, vol. 30, no. 6, p. 164

7. Lee, E. S. (1966). A Theory of Migration. Demography, 3(1), 47–57. https://doi.org/10.2307/2060063

8. Massey, D. S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., & Taylor, J. E. (1993). Theories of International Migration: A Review and Appraisal. Population and Development Review, 19(3), 431–466. https://doi.org/10.2307/2938462 4.

9. Melkonyan, V. A. (2015). Glavny`e teoreticheskie obosnovaniya i podkhody` k mezhdunarodnoj migraczii rabochej sily`. *Soczial`naya Politika i Chelovecheskij Kapital*.

10. Musaripova, A. (2018). *Problema bezraboticzy` sredi molodyozhi RK.* Kursiv Research. https://kz.kursiv.media/2018-11-01/pochemu-menya-ne-berut-na-rabotu-problema-bezraboticy-sredi-molodyozhi/

11. Nadzhibulla F. (2021, June 4). *Trudovy`e migranty` iz Czentral`noj Azii vy`birayut Kazakhstan vmesto Rossii*. Azattyq. https://rus.azattyq.org/a/central-asian-migrant-workers-choosing-kazakhstan-over-russia-despite-lower-pay/31289747.html

12. *Negi`zgi` aleumetti`k-e`konomikaly`q korsetkishterdi`n serpi`ni`*. (2021). Ulttyk statistika byurosynyn Resmi Resursy`. https://stat.gov.kz

13. Novyi trend: migraciya iz-za izmeneniya klimata (2021). - https://forbes.kz//process/resources/novyiy_trend_migratsiya_iz-za_izmeneniya_klimata/?

14. Osadchaya G.I., Vartanova M.L. (2021). Demograficheskaya bezopasnost' i tendencii razvitiya migracionnyh processov v evraziiskom ekonomicheskom soyuze v usloviyah pandemii (COVID-19) // Voprosy upravleniya. №1, p.68

15. Ravenstein E. G. The Laws of Migration: Second Paper // Journal of the Royal Statistical Society. 1889. № 52. P. 241—305

16. Rynok truda Kazahstana: razvitie v usloviyah novoi real'nosti. – Godovoi otchet po rynku truda // Centr razvitiya trudovyh resursov / Workforse Development Centre, 2021

17. Sal`Zhanova, S. A., & Gelashvili, N. N. (2017). Analiz diproporczij soczial`no-e`konomicheskogo razvitiya regionov respubliki Kazakhstan. *Vestnik AGU, Vy`pusk 3.*

18. Temirova, A. B., & Abdimomy`Nova, A. S. (2016). Soczial`no-e`konomicheskaya differencziacziya regionov Respubliki Kazakhstan. *Vestnik RUDN, Seriya E`konomika, // Problemy` Regional`nogo Razvitiya.*

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19. Tuleibaeva A.S. Razvitie mejdunarodnogo rynka truda v usloviyah sovremennoi tehnologicheskoi transformacii // Almaty, 2021, p.100

20. V kakih regionah Kazahstana samyi bol'shoi uroven' bezraboticy (2021). - Obzorno-analiticheskii portal Strategy2050.kz: https://strategy2050.kz/ru/news/v-kakikh-regionakh-kazakhstana-samyy-bolshoy-uroven-bezrabotitsy/

21. *Vneshnyaya migracziya naseleniya RK*. (2019). -. http://ranking.kz/economy

22. Zholdasky`Zy`, Z. (2019). Analiz prichin i posledstvij bezraboticzy` v Kazakhstane. Analiticheskie materialy`. *Central Asian Bureau for Analytical Reporting*. https://cabar.asia/ru/analiz-prichin-i-posledstvij-bezrabotitsy-v-kazahstane

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Analysis on State of Mortgage Lending for 2016-2020 in the Republic of Kazakhstan

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Abstract

It is significant to resolve important socio-economic tasks such as increasing the availability of housing for the population, increasing the share of housing owners in order to stabilize society. To provide solutions, there is a necessity to form a market housing financing system that meets the competitive demand of the population for housing. The main directions of worldwide recognized long-term financing of housing construction are mortgage lending and the system of construction savings. Therefore, for Kazakhstan, the effective formation of the mortgage lending system is one of the priorities of housing policy. At the current stage of Kazakhstan's development, the mortgage lending system is the most important direction for the development of long-term housing financing. International experience depicts that the development of mortgage lending brings maximum benefits for the state and the country's economy as a whole. This is explained, first of all, by the fact that it affects problems of a housing nature and is quite significant on the part of the social policy of the state. Taking into account the multilateral socio-economic effect of the development of the mortgage lending system, this problem is presented as particularly relevant for Kazakhstan.

Moreover, it is essential to study the current results of the system over the past years and determine the level of development of the mortgage lending system in modern conditions to provide an analysis of the current state of mortgage lending in the country. The analysis of statistical data on the indicators of mortgage lending

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is carried out. The study encompasses the main issues related to the current state of mortgage lending in the Republic of Kazakhstan.

Keywords. mortgage, mortgage lending, housing, mortgage lending market in Kazakhstan, mortgage portfolio.

Introduction

Currently, within Kazakhstan's economic conditions, it is unaffordable for many citizens to independently accumulate funds for the purchase of real estate. In this regard, a mortgage is the only opportunity for the population to have their own housing. A mortgage is an effective tool used in world practice; it is a loan secured by real estate. When issuing a mortgage loan, the borrower receives a loan for the purchase of real estate and issues it as collateral to the bank. The borrower's right of ownership occurs right after the purchase. A mortgage loan is issued for a certain part of the cost of housing. The remaining part of the cost of the housing must be paid by the borrower from his or her own funds and is called a down payment. A mortgage is one of the most reliable ways of lending. There is a correlation between the market relations growth in Kazakhstan and the necessity of the development of mortgage loans every year.

The study aims at analyzing the current state of mortgage lending in the Republic of Kazakhstan.

Literature review

Legal support of mortgage lending in the country is carried out by the Law of the Republic of Kazakhstan (dated on December 23, 1995) "On the Mortgage of Real Estate"; it regulates relations arising in the application of mortgage of the property as a way to ensure the fulfillment of obligations.

There are diverse opinions among scholars regarding the meaning of the "mortgage" term. According to Balabanov (2002) "a mortgage is a loan received under the pledge of real estate", and according to Dovdienko (2015), "a mortgage is

a pledge of land and another real estate for the purpose of obtaining a mortgage loan (collateral loan)", as well as Razumova claims that (2016) "immovable property is one of the forms of property security of the debtor's obligation remaining in the debtor's ownership, and in case of non-fulfillment by the creditor of its obligation, it acquires the right to fulfillment through the sale of this property"

Lepekhin (2009) distinguishes mortgage as "one of the natural methods of securing obligations" and mortgage lending as a set of actions to provide a loan (loan) using a mortgage as security for the return of funds between the borrower; the pledgor on the one hand and the credit organization (other organization) on the other". According to local scholars such as Makysh (2011) "mortgage loan is a long-term loan with the pledge of real estate".

Based on the international experience, the development of mortgage lending provides maximum benefits for the state and the country's economy. This is explained, first of all, by the fact that it affects problems of housing features and is significant within the social policy of the state by stimulating the personal initiative of citizens (Fedorova, 2017).

Following factors influence the development of the industry and the availability of mortgage loans:

- the degree of development of the real estate market (market size, including economy-class housing);
- the volume of commissioning of new housing;
- real estate value;
- income level of the population (stability and transparency of income);
- regulatory factors (laws and regulations that establish the rules of conduct of market participants);
- other internal and external economic factors (Osipov, 2012).

There are main problems impeding the further development of the mortgage as a financial mechanism: high-interest rates for borrowers; high requirements for borrowers – mortgage borrowers; significant amounts of initial contributions;

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distrust of the main mass of borrowers in the stability of their own financial condition; low liquidity of the collateral object (Baymagambetov, 2013).

A mortgage loan can be described as a loan with several specific criteria, because of which banks, carrying out such a type of commercial activity, have the appropriate risk. The main risk in such lending is "credit", that is, the risk of non-repayment of the debt by the borrower in the appropriate term and amount (Kapisheva, 2014).

Methodology

The study of the current state of mortgage lending in the Republic of Kazakhstan is carried out through several steps. First, there is an analysis of the mortgage organizations' activities operating in the market. Second, there is a classification of the main indicators of mortgage lending by second-tier banks in the country. Overall, the following methods are used in this study: analytical analysis, statistical data comparison, induction, and deduction.

Findings and discussion

According to the world practice of economic development of different countries, there are several factors that make them all subject to crisis phenomena to some extent. One of the main mechanisms that increase the competitive demand of the population is the real estate and housing construction market. They are used to boost the economy due to the crisis. The most effective mechanism for attracting resources is the mortgage. Based on world experience, it is known that mortgage institutions are represented by banking and non-banking organizations of various forms of ownership. Mortgage transactions are handled by specialized institutions and commercial banks (Kurmanalina, 2016).

According to Table 1, mortgage institutions are diverse. There are two main models in the mortgage lending system: American and German. Kazakhstan used the German model experience while creating the housing construction savings system and the "Housing construction saving bank of Kazakhstan" JSC. Currently, this

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system has proven itself well and is one of the most popular programs in the mortgage lending market today. The development of mortgage lending in the Republic of Kazakhstan started in 1993. The state program of a new housing policy was approved in accordance with the decree of the President of the Republic of Kazakhstan. It provides long-term preferential loans for the purchase of housing or its construction up to 30 years. Consequently, the procedure of housing conditions improvement for middle and low-income families was eased. State Housing Construction Bank was established to implement the program, and through the Bank, lending was carried out from 1994 to 1997. The issuance of mortgage loans to citizens has been carried out by second-tier banks since 1998. Initially, the interest rates on mortgage loans were 20% per annum, the initial payment was about 40-50%, and the loan was issued for a period of no more than 5-6 years. Within the development of mortgage lending in the country, there were changes intended to alter the main criteria for mortgage lending (Diyarov, 2003).

Mortgage lending is carried out by both commercial banks and specialized mortgage organizations. According to the National Bank of the Republic of Kazakhstan 3 mortgage organizations operated in the Republic: JSC "Kazakhstan Mortgage Company", JSC "Express Finance" and JSC "Baspana". In 2011 The number of mortgage organizations in Kazakhstan decreased by 6 times and in 2016 by 2 times. This is mainly due to the inability of these organizations to withstand the global economic crisis. Subsequently, in accordance with the order of the deputy chairman of the National Bank of the Republic of Kazakhstan (dated July 3, 2017, No. 246) the license that was issued to JSC "Almaty regional mortgage Organization" for conducting banking operations in national and foreign currency was revoked. Therefore, the number of mortgage organizations was 2. In order to implement the program of mortgage housing lending a program called "7-20-25. New opportunities to acquire an accommodation for each family", was adopted in 2018. There was also the establishment of another mortgage organization called "Baspana" that was intended to increase the availability of mortgage housing loans for the population (Annual report of National Bank of the RK, 2018).

The total amount of assets of mortgage organizations is 728 747 000 KZT. That is more by 195.9% compared with indicators in 2016. The total amount of obligations of mortgage organizations increased from 196 352 000 KZT to 444 629 000 KZT, i.e.by 126.4%. It should be noted that mortgage organizations, except JSC "Almaty Regional Mortgage Organization", depicted an increase in profitability of services for three years until 2016 [p. 14, 38]. Moreover, there was a significant increase in the number of the issuance of mortgage loans by mortgage organizations since 2016. In order to have a holistic view of the mortgage organizations' activities, it is important to provide a summary analysis (Table 1) of the issuance of mortgage loans to the population for three years period (Gusmanova & Kozhakhmet, 2017).

Table 1. Summary analysis of the issuance of mortgage loans by mortgage organizations of the Republic of Kazakhstan, in thousand KZT.

No	Name of the organization	01.01.2016	01.01.2017	01.01.2018	01.01.2019	01.01.2020	% (change)
1	Kazakhstan Mortgage Company mortgage organization JSC	106519464	133207602	174305303	209644459	239048560	+14,02
2	Baspana mortgage organization JSC				36013732	250399177	+595,3
3	Express Finance mortgage organization JSC	60295	51586	238314	530735	507319	-4,4
4	Almaty regional mortgage organization JSC	90484	208256				
	Overall	106670243	133467444	174543617	246188926	489955056	+99,01

According to the data indicated in Table 1, the largest number of mortgage loans that were issued by mortgage organizations amounts to 489,955,056 thousand KZT. The increase in the volume of issued loans is presented in the following figure.
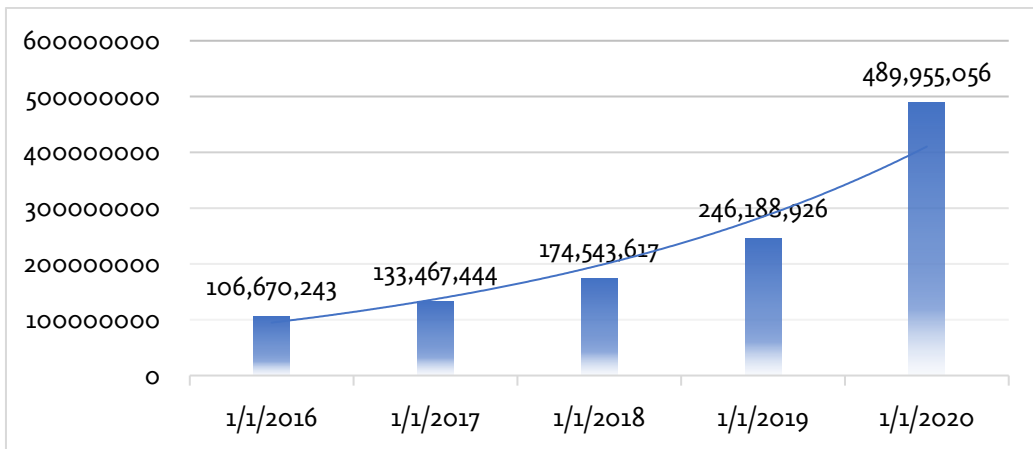

Figure 1. The volume of mortgage loans issued by mortgage organizations in the Republic of Kazakhstan, in thousand KZT.

The volume of issued loans increased by 243,766,130 thousand KZT in 2020, i.e. by 99.01% compared to 2019. 2015-2016 the 4.5-fold increase in mortgage loans issued in 2020 after the crisis shows good growth. There was also a positive increase by 4.5 times in 2020, after the crisis of 2014-2015.

Among mortgage organizations, "Kazakhstan Mortgage Company" JSC issued the largest number of loans. The total volume of loans issued over the past two years amounted to 448,693 million KZT, meaning that there was an increase of 14.02%. Thus, the volume of loans issued in 2016 amounted to 106,519,464 thousand KZT, i.e. 99.85% of the total amount. In 2017 - 133,207,602 thousand tenge or 99.8%, in 2018 - 174,305,303 thousand tenge or 99.86%, in 2019 - 85.15%, in 2020 - 48.79%. This was due to the fact that "Kazakhstan Mortgage Company" JSC, and "Housing construction saving bank of Kazakhstan" JSC, are partners of the state program for the development of Housing and mortgage construction in Kazakhstan. The reason for the decline in the total share over the past two years is the creation of the "Baspana" JSC mortgage organization. Mortgage loans issued by JSC "Baspana" under the"7-20-25. New opportunities to acquire an accommodation for each

family" program amounted to 36,013,732 thousand KZT, i.e. 14.62% in 2019. In 2020 the share was 51.1%.

Moreover, it is important to analyze the current state of the mortgage lending market of the Republic of Kazakhstan. In 2020, the banking sector of the Republic of Kazakhstan is represented by 27 second-tier banks. Commercial banks of Kazakhstan provide loans to both legal entities and individuals. Mortgage lending by commercial banks of the Republic of Kazakhstan is carried out under the following lending programs:

- purchase of real estate (on the secondary market);
- purchase of real estate from a house under construction;
- purchase of a land plot;
- construction of your own house;
- refinancing a mortgage loan issued by another bank;
- repair of real estate.

Table 2. Mortgage loans issued by second-tier banks and interest rates on them

Indicators	2016		2017		2018		2019		2020		Change	
	million. KZT	%	million. KZT	%	million. KZT	%	million. KZT	%	million. KZT	%	million. KZT	%
Overall loans	8166	10,7	15507	9,7	27009	9,5	43212	8,0	51528	8,1	8316	+19,2
In national currency	8166	11	15485	10	27009	10	43212	8,0	51528	8,1	8316	+19,2
short-term	1	3	4	4	5	0	30	4,2	1	7,2	-29	-96,7
long-term	8165	11	15481	10	27004	10	43182	8,0	51527	8,1	8345	+19,3
Note-the table is compiled by the author on the basis of data from the National Bank of the Republic of Kazakhstan for the corresponding periods												

Analysis on State of Mortgage Lending for 2016-2020 in the Republic of Kazakhstan
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According to Table 2, the total volume of mortgage loans amounted to млн 51,528 million KZT in 2020. Compared to the previous year, it increased by 8,316 million KZT, i.e., by 19.2%. Short-term mortgage loans in the national currency amounted to 30 million KZT in 2019. In 2020, it amounted to 1 million KZT.
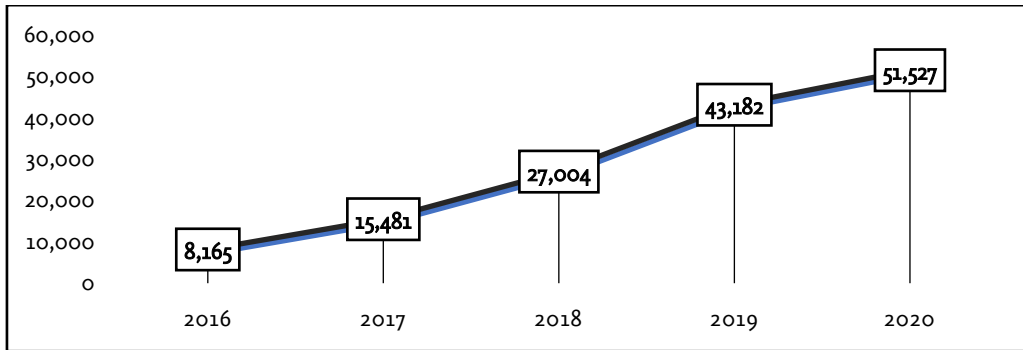

Figure 2. The volume of long-term mortgage loans issued by second-tier banks of the Republic of Kazakhstan, in million KZT.

According to Figure 2, the volume of long-term mortgage loans increased by 6.3 times in 2020 compared to 2016. Long-term loans amounted to 51,527 million KZT. Compared to the previous year, it amounted to 8,345 million KZT, meaning that there was an increase of 19.3%.

The minimum indicator of the average interest was indicated in 2019. Weighted average mortgage rates in the national currency have decreased over four years from 10.7% in 2016 to 8.0% in 2019. In 2020, the average interest rate was 8.1%.

However, mortgage loans issued in the national currency for a short period of time increased from 3% to 7.2%, respectively. And the average interest rates on long-term mortgages decreased from 11% to 8.1%.

In Kazakhstan, it is legally prohibited to issue new mortgage loans in foreign currency to individuals who do not have income in foreign currency since 2016 (The current state of the non-banking sector of the Republic of Kazakhstan, 2016). Therefore, the measures of the National Bank to reduce the level of dollarization of the banking system were sufficient. This was due to the fact that mortgage loans issued until 2016 in the short and long term have not been registered. Mortgage loans in foreign currency remained dominant until 2016 and showed an increase in

the overall fund of mortgage lending decline. The National Bank implemented a number of measures to gradually transfer these loans to the national currency.
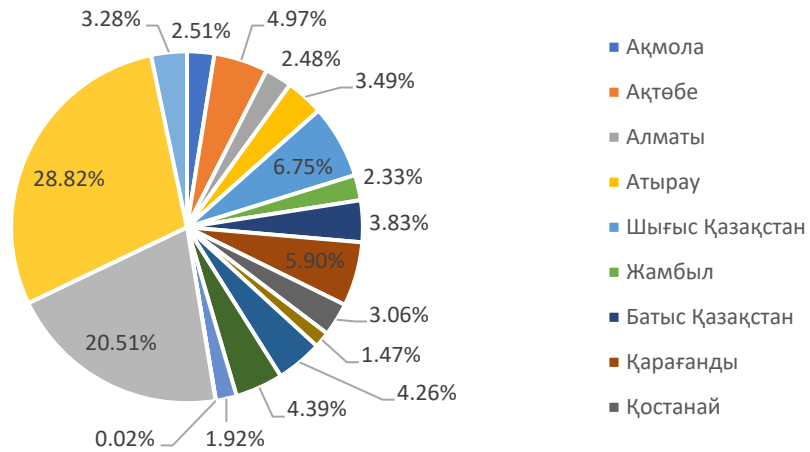

Figure 3. Specific indicators of mortgage loans issued in the regions of the Republic of Kazakhstan for January 2020.

In general, the amount of mortgage loans issued in the Republic as of January 2020 is 51,499,829 thousand KZT. The largest number of mortgage loans issued in Nur-Sultan, the amount is 14,840,186 thousand KZT, i.e. the share in the RK was 28.82%. In Almaty, the share is 10 561 774 thousand KZT. East Kazakhstan region - 6.75%, Karaganda region – 5.9%, Aktobe region - 4.97%, and Pavlodar region – 4.39% (Figure 3).
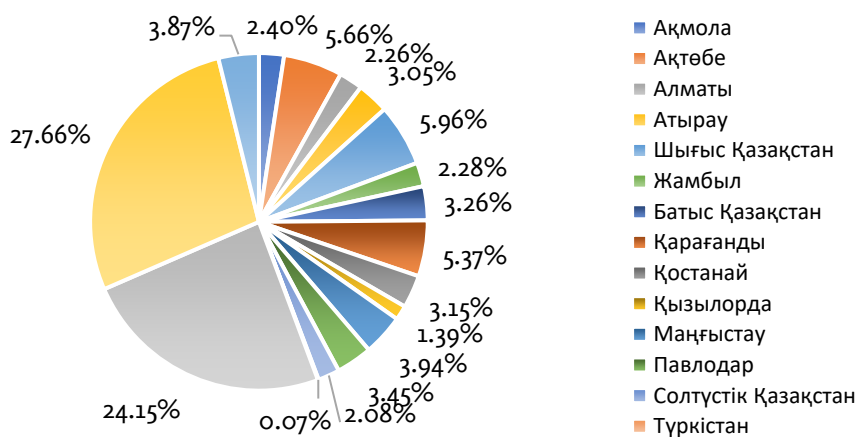

Figure 4. Specific indicators of mortgage lending of individuals in the regions of the Republic of Kazakhstan for January 2020.

Concerning the analysis of the remaining volume of mortgage lending to the population in the country, the share is 1,792,487,778 thousand KZT in 2020. The largest share is in Nur-Sultan -495,739,511 thousand KZT, i.e. 27.66% of the total share. In Almaty, the share is 432,922,427 thousand KZT, making 24.15%. of the total share of the mortgage lending in the Republic (Figure 4).

Table 3. 2016-2020 dynamics of mortgage loans of commercial banks, in billions KZT.

Indicators	2016	2017	2018	2019	2020	Change, in %
Loan portfolio	15 553,70	15 510,80	13 590,50	13 762,70	14 742,0	+7,12
Loans to individuals	3 872,90	3 766,60	4 259,10	4 993,40	6 329,5	+26,76
For the construction and purchase of housing for individuals, including mortgage housing loans	1 109,30	1 107,00	1 215,50	1 427,80	1 880,6	+31,71
Mortgage housing loans to individuals	1 039,10	1 020,20	1 129,20	1 330,70	1 779,9	+33,76
Note – the table is compiled by the author on the basis of data from the National Bank of the Republic of Kazakhstan for the corresponding periods						

According to Table 3, second-tier banks' loans in 2020 amounted to 979.32 billion KZT compared to 2019, i.e. there was an increase of 7.12%. Loans to individuals in 2020 amounted to 1,336.10 billion KZT (increased by 26.76%), i.e. the share of these loans in the loan portfolio increased by 18.34%. Moreover, mortgage housing loans and their share in the portfolio of loans issued to individuals amounted to 449.20 billion KZT (+33.76%), and their share increased by 24.87% from the previous level.

Over the indicated five years, loans issued by individuals for the purchase and construction of housing (including mortgage housing loans) amounted to 771.30 billion KZT (+69.53%). Its share in the loan portfolio increased by 78.86%. Mortgage

housing loans to individuals for five years amounted to 740.80 billion KZT (+71.29%), i.e., the share in the loan portfolio increased by 80.72%.

Within the segment of mortgage lending in retail and within the currency of loans offered, the main demand has been the tenge since 2016. Whereas there was no demand for loans in foreign currency. Among the factors of growth in demand for loans from the population, there are several important factors: the increase in loan terms; the decrease in interest rates; the necessity to finance consumer spending for the purchase of durable goods, as well as to some extent the perception of the debt burden and the growth of consumer confidence in terms of the prospects for the development of the real estate market (Beisenov & Abzhalelova, 2019).

After the crisis of 2015-2016, the housing market in the country resumed in 2018. According to the National Bank of the Republic of Kazakhstan, the growth of the dollar exchange rate for the year was 10%, the price of oil in October 2018 reached 86 USD. During that month 1 USD amounted to 367 KZT. Thus, the growth of real estate prices in the cities of Kazakhstan continued to increase at a moderate pace in the following years. The mortgage lending market in Kazakhstan experienced a period of decline, which was largely facilitated by the global financial crisis, that led to the collapse of the real estate market. Most of the mortgage loans were issued through the Pledge of creditable real estate, which significantly lost its market value due to the currency features. Therefore, all these factors led to forced government measures aimed at supporting the mortgage lending market. This was, first of all, due to social factors.

In the spring of 2018, the former President of Kazakhstan Nursultan Nazarbayev carried out large-scale social reforms. According to the "7-20-25" housing program, mortgage conditions for obtaining housing are as follows: the loan interest rate should not exceed 7% per annum, the initial payment does not exceed 20%, the loan term is up to 25 years. The loan is issued only in tenge KZT. The issuance of the first loans began on July 4, 2018. Financiers around the world predicted that the 2020 crisis is inevitable, and the consequences would be much worse than in 2008 and 2015-2016. The relevance of the study is reflected by the analysis of the current state of mortgage lending in the Republic of Kazakhstan.

Commercial mortgages are gradually being replaced by state mortgage programs. Some banks have completely abandoned their own housing loans in favor of loans issued under state support. Today, government programs meet the interests of various categories of potential borrowers of the primary and secondary markets, regardless of the availability of housing in private ownership.

It should be noted that since 2020, banks have restricted the requirements for borrowers. Thus, it was forbidden to issue unsecured loans to borrowers with incomes below the subsistence minimum. Since there is a need to confirm your official income within the last 3-12 months to get a loan, unemployed citizens are also not able to issue a loan. At the same time, banks are prohibited from charging commissions if they delay payments on loans for more than three months or more than 90 days.

As of March 2020, 14 banks provided mortgages under certain programs: Halyk Bank, Atfbank, CenterCredit bank, Sberbank, Jýsan Bank, ForteBank, BankRBK, Nurbank, Eurasian bank, Tengri Bank, Housing Construction Savings Bank of Kazakhstan. Altyn Bank considered mortgages only in the following cities: Nur-Sultan, Almaty, Atyrau and Aktau. Kassa Nova bank issues a mortgage only under the "Orda" program. Eurasian Bank offered mortgages within the framework of the programs "7-20-25" and "Baspana" [19]. Despite the positive changes, there are serious obstacles in the mortgage lending market that prevent it from becoming widespread and popular in Kazakhstan. Among such problems, first of all, high-interest rates on mortgages are indicated. According to the world and economic experience, favorable rates for the population, are about 8-10% per annum in foreign currency. However, the resources raised in the banking market are usually expensive. The interest rates on individual mortgage lending proposals of commercial banks are high (on average 17.0%) and the requirements are strict (Bayanov, 2018).

Table 4. Dynamics of the volume of the loan portfolio of STBs of the Republic of Kazakhstan for January-March 2020, in billion KZT

Indicator	01.01.2020	01.02.2020	01.03.2020	change., %
Loan portfolio	14 742,0	14 508,6	14 537,6	-1,39
Loans to individuals	6 329,5	6 378,2	6 452,3	+1,94
Construction and purchase of housing, including	1 880,6	1 900,5	1 923,2	+2,27
Mortgage housing loans	1 779,9	1 799,8	1 825,5	+2,56
Note-the table is compiled by the author on the basis of data from the National Bank of the Republic of Kazakhstan for the corresponding periods				

Over the specified period, the loan portfolio of second-tier banks decreased by 1.39%. Thereof, loans to individuals for the construction and purchase of housing increased by 2.27%, and mortgage housing loans amounted to 45.6 billion KZT (+2.56%) (Table 4).

Table 5. Dynamics of the residual volume of mortgage lending to the population by second-tier banks in the country, in million KZT

Indicator	01.15	01.16	01.17	01.18	01.19	01.20	change, %
Overall loans	916 581	913 477	996 275	1 097 000	1 318 853	1 794 310	+95,76
In national currency	778 393	766 955	875 563	1 022 660	1 273 370	1 769 643	+127,35
Short-term	4 467	2 910	6 421	5 225	2 358	1 918	-57,06
Long-term	773 925	764 045	869 141	1 017 434	1 271 012	1 767 725	+128,41
In foreign currency	138 188	146 522	120 713	74 341	45 482	24 666	-82,15
Short-term	234	275	106	57	161	102	-56,50
Long-term	137 954	146 247	120 607	74 284	45 321	24 565	-82,19
Note-the table is compiled by the author on the basis of data from the National Bank of the Republic of Kazakhstan for the corresponding periods							

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It can be seen that there is a decrease in the residual value of mortgage lending issued in foreign currency by second-tier banks of the country in the residual volume of mortgage lending to the population (Figure 5). In general, mortgage lending in foreign currency decreased by 82.15% in 2020 compared to 2015. In particular, short-term mortgage loans fell by 56.50%, while long-term mortgage loans fell by 82.19% (Table 5).
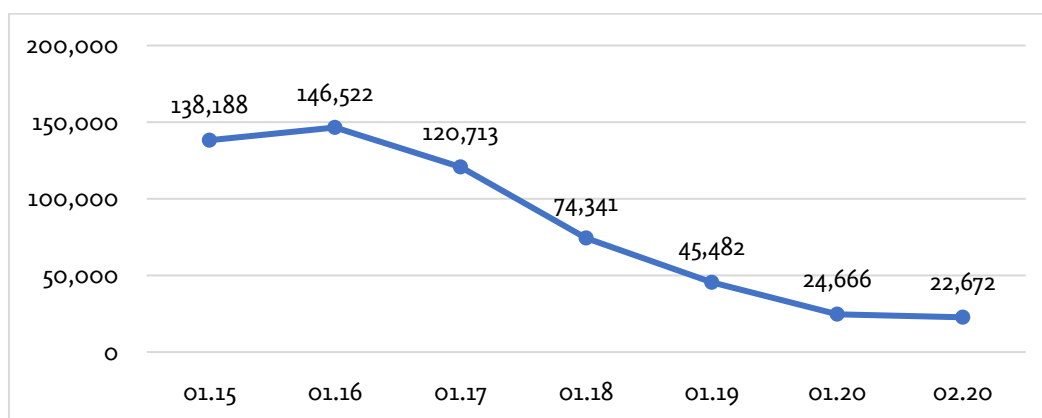

Figure 5. 2015th -2020th dynamics of residual volume of mortgage lending of the population in foreign currency by second-tier banks of the Republic of Kazakhstan, in million KZT

Considering the size of the loan portfolio of mortgage organizations in the country, the overall decrease is 54.86%. Loans to individuals fell by 54.42%. Mortgage housing loans decreased by 80.23%. The fact is that in 2020, there was an establishment of JSC "Stability Fund of Kazakhstan" and JSC "Baspana". As a result, the activities of the mortgage organization were fully transferred to the responsibility of JSC "Stability Fund of Kazakhstan" (Table 6) (Kazakhstan Today, 2020).

Table 6. Dynamics of the volume of the loan portfolio of mortgage organizations for January-March 2020, in billion KZT.

Indicator	01.01.2020	01.02.2020	01.03.2020	changes, %
Loan portfolio	490,0	499,3	221,2	-54,86

In national currency	461,4	479,3	210,3	-54,42
Construction and purchase of housing, including	457,9	475,7	206,6	-54,88
Mortgage housing loans	312,6	331,0	61,8	-80,23
Note - the table is compiled by the author on the basis of data from the National Bank of the Republic of Kazakhstan for the corresponding periods				

Within the 2020 emergency occasions in the country, JSC "Housing construction saving bank of Kazakhstan", "Baiterek Development" and "Kazakhstan mortgage company" postponed mortgage payments to Kazakhstanis under state and own programs for three months (Official Information Source of the Prime Minister of the RK, 2020).

For individuals and legal entities experiencing temporary financial difficulties, the subsidiaries of the housing block of the Holding decided to extend the term for payments for three months (from April to June). That was without considering penalties and penalties for all transactions of Rent/Sale (including installments) with the right to purchase housing and non-residential real estate, including the amount of principal debt and remuneration. Obviously, such decisions have a significant impact on the credit market of the country as a whole.

In conclusion, mortgage lending still develops due to current demand. It can be indicated by the positive dynamics of increasing the volume of mortgage lending to the population and remaining unsatisfactory need of the population for housing. Since solving the housing problems of the population is one of the most important socio-economic strategies of the country, mortgages for the population are still relevant, in a way to purchase their own housing.

References

1. *Annual report of the National Bank of the Republic of Kazakhstan for 2018.* (2018). KASE. https://kase.kz/files/emitters/HFIN/hfinp_2018_rus.pdf

2. Balabanov, I. T. (2002). Real estate economics. [Ekonomika nedvizhimosti]. *SPb.: S-Peterburg*.

3. Bayanov, A. B. (2018). On the issue of the development of mortgage lending in Kazakhstan. [K voprosu o razvitii ipotechnogo kreditovaniya v Kazahstane]. *Youth and Science: Step to Success.* [*Molodezh' i Nauka: Shag k Uspekhu*].

4. Baymagambetov, D. S. (2013). Formation and development of the mortgage institution in the Republic of Kazakhstan. [Stanovlenie i razvitie instituta ipoteki v RK]. *Economics and Management. [Ekonomika i Upravlenie]*.

5. Beisenov, A. & Abzhalelova C. (2019). Actual problems of mortgage lending in the Republic. Kazakhstan. [Aktual'nye problemy ipotechnogo kreditovaniya v Respublike. Kazakhstan]. *Orcacenter. Ru Omsk. [Orcacenter. Ru Omsk]*.

6. *The current state of the non-banking sector of the Republic of Kazakhstan as of January 01, 2020.* (2020). FINREG. Retrieved from https://finreg.kz/cont/%D0%A2%D0%A1%20%D0%9D%D0%9E%2001.07.2 0%20(%D1%80%D1%83%D1%81).pdf

7. Diyarov, S. K. (2003). *Real estate economics. Kyzylorda.* [*Ekonomika nedvizhimosti. Kyzylorda*].

8. Dovdienko, I. V. (2015). Mortgage. Control. Organization. [Ipoteka. Upravlenie. Organizaciya]. *Assessment: study guide. [Ocenka: uchebnoe posobie]*. M.: YUNITA-DANA.

9. Fedorova, T. S. (2017). Mortgage lending in Kazakhstan. The paradigm of modern science through the eyes of the young. [Ipotechnoe kreditovanie v Kazahstane. Paradigma sovremennoj nauki glazami molodyh]. *Sbornik Materialov XI Mezhdunar.Nauch. Konf., Posvyashch., Pamyati Osnovatelej Kostanajskogo Filiala CHelGU T.ZH. Atzhanova i A.M.Rodnova, 12 Aprelya 2017.*

10. Gusmanova, Z., & Kozhakhmet, A. (2017). The main directions of development of mortgage lending in Kazakhstan. [Osnovnye napravleniya razvitiya ipotechnogo kreditovaniya v Kazahstane]. *KEU Zharshysy: Economics, Philosophy, Pedagogy, Jurisprudence. [KEU ZHarshysy: Ekonomika, Filosofiya, Pedagogika, Yurisprudenciya]*.

11. *Housing Construction Savings Bank to grant deurce: https://primeminferrals to customers automatically, without supporting documents.* (2020). Official Information Source of the Prime Minister of the Republic of Kazakhstan. Retrieved from https://primeminister.kz/en/news/zhilstroysberbank-soobshchil-o-7-shagah-navstrechu-klientu-v-rezhime-chrezvychaynogo-polozheniya-2621038

12. *JSC stability fund of Kazakhstan and JSC mortgage organization Baspana merged* (2020). Kazakhstan Today. Retrieved from https://www.kt.kz/kaz/economy/_1377894383.html

13. Kapisheva, T. A. (2014). Problems of mortgage lending in Kazakhstan. [Problemy ipotechnogo kreditovaniya v Kazahstane]. *The problem of accounting and finance. [Problema Ucheta i Finansov].*

14. Kurmanalina, A. K., Fetkulov, A. H., & Zhumadildina, A. K. (2016). Some issues of mortgage lending in Kazakhstan: problems and solutions. [Nekotorye voprosy ipotechnogo kreditovaniya v Kazahstane: problemy i puti resheniya]. *Actual problems of the humanities and natural sciences. [Aktual'nye Problemy Gumanitarnyh i Estestvennyh Nauk].*

15. *Law of the Republic of Kazakhstan "On mortgage of real estate" No. 2723, dated December 23, 1995.* (1995). Adilet Zan. Retrieved July 15, 2021, from https://adilet.zan.kz/kaz/docs/U950002723

16. Lepekhin, I. A. (2009). Theoretical problems of mortgage and mortgage lending in modern Russia. [Teoreticheskie problemy ipoteki i ipotechnogo kreditovaniya v sovremennoj Rossii]. *State and Law: Theory and Practice [Gosudarstvo i Pravo: Teoriya i Praktika].*

17. Makysh, S. B. (2011). The theory of money, credit, banks. [Aksha, nesie, bankter teoriyasy]. Almaty, *Seven Charters [Zheti Zhargy].*

18. Musina, R. S. (2018). Mortgage and mortgage lending in the Republic of Kazakhstan. [Ipoteka i ipotechnoe kreditovanie v Respublike Kazahstan]. *Modern Economics: Current Issues, Achievements and Innovations. [Sovremennaya Ekonomika: Aktual'nye Voprosy, Dostizheniya i Innovaci]i.*

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19. Osipov, A. Y. (2012). How to get a mortgage in Rossii dostupnoj? World experience. [Kak sdelat' ipoteku v Rossii dostupnoj? Mirovoj opyt]. *Russian entrepreneurship.* [*Rossijskoe Predprinimatel'stvo*].

20. Razumova, I. A. (2016). *Mortgage lending.* [*Ipotechnoe kreditovanie. 2-e izd.*]. SPb.: Piter.

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