BRAIN DRAIN AMIDST ECONOMIC CRISIS IN SRI LANKA: AN ANALYSIS ON THE MIGRATION OF CONSTRUCTION PROFESSIONALS

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Abstract: The migration of skilled professionals, commonly referred to as "brain drain," has a significant impact on labour-intensive sectors, notably the construction industry. In Sri Lanka, this trend has intensified, particularly amid the current economic crisis, creating significant challenges for the industry's workforce stability and long-term sustainability. Although brain drain has been widely studied in other Sri Lankan industries, there remains a lack of research specifically addressing the construction sector. This study aims to bridge this gap by analysing the outflow of construction professionals through a qualitative research approach, including a comprehensive literature review and semi-structured interviews conducted with both migrated construction professionals and local construction company owners. Findings indicate a substantial escalation in brain drain since 2020, linked to various organizational, industry-wide, and national-level push and pull factors. Key drivers include the economic crisis as a principal push factor, alongside attractive salary packages offered by host countries acting as a major pull factor. By highlighting these dynamics, this research contributes to the existing knowledge base, equipping stakeholders with actionable insights to develop strategies for retaining professionals. Furthermore, it emphasizes the need for future research on the impacts of brain drain and proposes the development of guidelines to mitigate its adverse effects on the Sri Lankan construction industry.

Keywords: Brain drain; Construction industry; Economic crisis; Human capital; Sri Lanka

1. Introduction

In the midst of global socio-economic dynamics, the migration of professionals across borders emerges as a significant occurrence worldwide. Concerning the human migration, Ore and Akintayo (2023) state that it entails the altering of the residence temporally or permanently for a brief or an extended duration. The human migration has been categorised into several typologies based on various aspects and theories by the researchers. Most of the literature identify two categories as domestic migration and international migration based on the destination (Dustmann & Glitz, 2011; Ore & Akintayo, 2023). In addition, since highly skilled migrants are identified as the human capital of organisations, communities, and nations (Zea, 2020), the migration is being analysed based on the skill level of migrants. Ore and Akintayo (2023) named the movement of these skilled migrants as the "human capital flight". It is also referred to as "Brain drain" (Kone & Ozden, 2017).

The brain drain has emerged as a significant research area in migration because of the continuous stream of skilled individuals from less developed countries to more advanced countries (Ekanayake & Amirthalingam, 2019). It has effects on both the origin and host countries, but it poses a significant challenge for the developing countries that are striving to progress (Zea, 2020). Moreover, the brain drain refers not only the migration of people, but also the subsequent socioeconomic expenses of emigration (Theodossiou et al., 2019). Hence, Beine et al. (2001) states that the brain drain has a negative impact on the growth of the origin country. The latest global estimate suggests that there were approximately 281 million people living as international migrants in 2020, which represents 3.6% of the total global population (International Organisation for Migration [IOM], 2021). Among them, the knowledge loss due to the loss of professionals is a global issue which exists long term especially in developing countries (Dodani & LaPorte, 2005).

Sri Lanka is currently experiencing a severe economic crisis, which has created substantial challenges for both the population and the government (George et al., 2022). According to these authors, the crisis is characterized by escalating inflation, food scarcity, rising poverty, fuel shortages, medicine deficits, frequent power outages, and widespread street protests. Social scientists suggest that, in times of economic hardship, geographical mobility is often used as a strategy by communities to alleviate difficulties (Lafleur & Stanek, 2016). Furthermore, crises can act as "turning points," influencing various social phenomena, including migration (Alink et al., 2001). Given these dynamics, the current economic crisis in Sri Lanka provides a crucial context for analyzing the migration of construction professionals, as it likely intensifies the factors contributing to brain drain within the industry.

The construction sector holds a significant importance in most of the countries (Jung & Han, 2017). The recent global economic crisis has severely impacted the construction industry, resulting in the bankruptcy of several companies and the suspension of numerous projects (Tijhuis, 2019). The scholars give various factors that influence the brain drain of a country

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in different aspects while most of the literature identify the economic crisis as a major governing influence (Theodossiou et al., 2019; Buckley, 2012). At the moment, Sri Lanka finds itself amidst an economic and political crisis, marked by the ongoing high inflation (George et al., 2022). It has a considerable effect on the construction industry in Sri Lanka. The aforementioned high inflation, the depreciation of local currency and the decisions of government are among several economic factors that have led to the escalation in the cost of construction materials (Thilakshan et al., 2023). Therefore, the construction projects are affected by this variability of material prices (Oghenekevwe et al., 2014). Moreover, the project shutdowns, time and cost overruns, job losses and financial implications followed by the COVID-19 pandemic (Gamil & Alhagar, 2020) led the construction industry to a downturn. This situation provides the background for the professionals within the industry to shift into another country in the expectance of better outcomes. In essence, the brain drain turns into a curse when the migration occurs on a significant scale and when the return happens outside the productive years (Ekanayake & Amirthalingam, 2020). Hence, analysing the phenomenon of brain drain and the reasons behind it, are significantly important to address the negative impacts and enhance the benefits of brain drain to the origin country.

However, there are a considerable number of scholarly articles regarding brain drain during the economic crisis in Greece over the last decade (Pelliccia, 2013; Theodossiou et al., 2019; Lazaretou, 2022; Anastasiadou, 2016). Although brain drain typically occurs from a developing country to a developed country, Greece has experienced this phenomenon despite being a developed country, as demand for graduate scientists in its labor market has depreciated (Theodoropoulos et al., 2014). While these articles are similar to this study, they cannot be applied to the Sri Lankan construction industry, as the crisis situation in Greece differs from the Sri Lankan context. Additionally, those studies were conducted within the context of a developed country, focusing on the migration of scientists. Therefore, there is a lack of research on brain drain among professionals and its impact on the Sri Lankan construction industry. This research thus aims to analyze brain drain within the Sri Lankan construction industry, investigating the factors influencing the migration of construction professionals amid the current economic crisis. This includes a review of the economic crisis, its effects on brain drain, and an examination of trends and patterns of migration among construction professionals during this period in Sri Lanka.

This paper starts with an introduction, followed by a review of existing literature. It then outlines the research methodology, presents the findings, and discusses them before concluding with recommendations.

2. Literature Review

The following sub sections reviews the existing literature on the brain drain, economic crisis and its impact on the brain drain and other reasons behind the brain drain of the construction professionals during the economic crisis.

2.1 BRAIN DRAIN

The term "brain drain" was first used to describe the misplacement of skilled persons from Britain, mostly to United States (Clemens, 2013). The people in 1970s saw that loss of skilled personal from a developing country as the deficit of the country's most precious human capital (Kone & Ozden, 2017). The authors further state that the term "brain drain" is highlighting the importance and the unreasonable nature of this problem.

Brain drain is not a novel phenomenon in Sri Lanka, as individuals with advanced education who held administrative positions during British colonial era migrated to other British colonies for employment (Collyer et al., 2009). Further, in the mid of 50's decade, Sri Lankan professionals who were in English speaking wealthy families left the country for a long period or permanently by gaining citizenships of the destination country (Colomboge, 2010). It was further improved and influenced in 60's decade by several government policy implementations and the shift of the language from English to national languages (Wickramasekara, 2010). However, the economic boom of Middle East countries in 70's decade due to the oil price escalation created a huge demand for construction labour resulting a considerable momentum in the migration of Sri Lanka (Colomboge, 2010).

2.2 TRENDS AND PATTERNS OF BRAIN DRAIN IN SRI LANKA

According to the statistics published by the Sri Lanka Bureau of Foreign Employment (SLBFE), the registered total of professional, middle and skilled level migrants has been increased by around 43% from 2012 to 2022 (SLBFE, 2023). As per the Annual statistical report of foreign employment 2022, the professional level, middle level and skilled level migrants can be considered as migrant types who contribute to brain drain. Figure 1 illustrates the pattern of brain drain in Sri Lanka based on the statistics of registration of migrants to SLBFE.

The pattern demonstrated in Figure 1 shows a sudden drop in the number of all the skill levels in 2020. According to the World Migration Report 2022, the global migration had a huge decline in 2020 due to the COVID-19 pandemic and the imposed travel restrictions (IOM, 2021). This global situation can be applied to the drop of brain drain in 2020 of Sri Lanka as well. After 2020, it has been drastically hiked to the maximum number of skilled, middle and professional level migrants in 2022. As identified in the literature review, economic crisis is the major influence towards brain drain in a country while Mushtaq (2023) states that Sri Lanka has gone to a critical end of economic crisis during 2022. Therefore, this massive incline of brain drain can be identified as a critical impact of the prevailing economic crisis in Sri Lanka (Kaluarachchi & Jayathilaka, 2024).

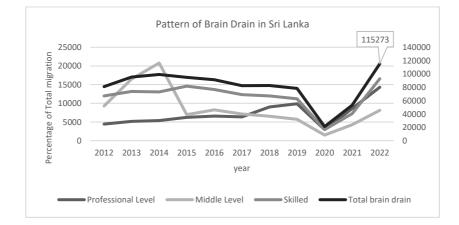


Figure 1: Pattern of brain drain in Sri Lanka from 2012 to 2022 (Source: SLBFE, 2023)

2.3 FACTORS AFFECTING THE BRAIN DRAIN

The brain drain has been affected by various factors globally. In Italy, young and highly skilled graduated people tend to leave the country, as it is governed by the elderly, and they only offer underpaid jobs with fixed term contracts (Tintori & Romei, 2016). In Spain, young and qualified migrants tend to leave the country not only due to economic crisis but also to seek novel experiences, often as a part of the globalisation of labour force (Bermudez & Brey, 2017). Further to Ore and Akintayo (2023), Nigerian experts are pulled towards United States by greater educational facilities, job opportunities, favourable living and job environment, and considerable wages. The authors further stated that, they are pushed away by unreasonable recruitment practices and lack of domestic employment.

The driving factors of migration can be formulated as influencing elements of a push-pull framework (Cassarino, 2004). It is a model that separate the negative and positive factors which push the migrants away from the origin country and pull them towards the host country (Hagen-Zanker, 2008). It further describes that the migration is happening towards a spatialeconomic equilibrium which the flow is directed from a less income area to a higher income area and from densely populated areas to less populated areas (Haas, 2008). Table 1 summarises the factors influencing brain drain in Sri Lanka based on the push-pull framework according to various authors.

Factors Influencing the Brain Drain	[1]	[2]	[3]	[4]	[5]	[6]	[7]
Push Factors	1-3	1-1	[-]	1.7	[-]	[-]	
Economic crisis				✓	✓	✓	✓
Lack of professional development opportunities	\checkmark			\checkmark		\checkmark	\checkmark
Shortage of intellectual guidance			\checkmark				
Need for a better income		\checkmark			\checkmark		\checkmark
Political factors			\checkmark	✓		\checkmark	\checkmark
Low job satisfaction			\checkmark				
Corruption				✓		\checkmark	\checkmark
Lack of quality of life				\checkmark	\checkmark	\checkmark	
Pull Factors							
Higher quality of life	✓	√	√	√		✓	√
Better job opportunities			\checkmark	✓		\checkmark	
Better working conditions	✓						\checkmark
Educational opportunities	✓		\checkmark			\checkmark	\checkmark
Higher income		\checkmark		\checkmark		\checkmark	\checkmark
Favourable political climate		✓					
Sources: [1] De Silva et al., 2013; [2] De Silva et al., 2014; [3] Anas & Wickremasinghe, 2010; [4] Kularathne							
& Samarathunga, n.d.; [5] Central Bank of Sri Lanka (CBSL, 2023); [6] Gunawardena & Nawaratne, 2017; [7]							

Table 1: Factors Influencing the Brain Drain in Sri Lanka

Samaraweera & Upekshani, n.d.

Among the push and pull factors identified in the above table, factors related to economy, income and financing play a vital role. Moreover, Marques and Góis (2016) also highlighted that there is a considerable increase in the migration of highly skilled people from Portuguese during the economic crisis. Further, several researchers and government bodies have identified economic crisis as a major push factor which motivate skilled personal to leave Sri Lanka (Kularathne & Samarathunga, n.d.; CBSL, 2023; Gunawardena & Nawaratne, 2017; Samaraweera & Upekshani, n.d.). Hence, it was decided to focus this study on the brain drain amidst economic crisis. The next section therefore elaborates economic crisis in Sri Lanka and its impact on brain drain.

2.4 ECONOMIC CRISIS AND ITS INFLUENCE ON BRAIN DRAIN IN SRI LANKAN CONSTRUCTION INDUSTRY

During the last decade, the global economic crisis began from the developed economies and subsequently spread worldwide, with the uneven distribution of its impacts geographically (Lafleur & Stanek, 2016). As a result, Sri Lanka is also facing a significant economic crisis currently, resulting a considerably hard time for the people and the government (George et al., 2022). Further to the authors, it is continuing with the accelerated inflation, food scarcity, poverty, fuel crisis, medicine shortage, power interruptions and street protests. According to Sunday Times newspaper article on the economic mismanagement started from the flexible tax concession which helped the private sector and individual tax payers while making a huge recession in the tax revenue along with the chemical fertilizer ban ("Brain Drain and Migration," 2023). As a strategy to overcome the reduced tax revenue, government escalated the taxes creating a huge stress on the workers with an insufficient monthly income ("Brain Drain and Migration," 2023).

As per several authors, economic crisis is one of the major factors influencing the brain drain of a country (Kularathne & Samarathunga, n.d.; CBSL, 2023; Gunawardena & Nawaratne, 2017; Samaraweera & Upekshani, n.d.). Similarly, according to development economists, Sri Lankan public services have been distracted due to the flow of brain and it is considered as a usual impact of an economic crisis ("Brain Drain and Migration," 2023). Further, Lansakara (2022) argues that the prevailing crisis have been impacted on the increment of the foreign employment demand due to the increased job redundancy, rupee devaluation and higher cost of living, and entrance of the novel skilled or professional category to the migrant workers in Sri Lanka.

Being a labour-intensive industry, construction sector is affected severely by the brain drain in Sri Lanka. On the other hand, Colomboge (2010) stated that with the economic boom in West, Middle Eastern and Asian countries, construction professionals of countries such as Sri Lanka got more opportunities in their large construction projects. As Qatar hosted the FIFA World Cup in 2022, they implemented mega scale constructions in late 2020 creating a considerable demand for construction professionals (Ekanayake & Amirthalingam, 2020). In addition, Engelbrecht (2014) revealed that plumbing sector of Sri Lanka is having a huge brain drain. Hence it is evident that the Sri Lankan construction industry experiences a brain drain and it has various impacts on the industry. In the construction industry, Prabhashwara (2022) states that the brain drain has created a skill gap specially with plumbers in Sri Lanka.

In contrary, Ekanayake and Amirthalingam (2020) stated that the construction professionals who migrated to Qatar for mega scale projects have exposed to novel technologies and developed their industry knowledge and experience displaying the brain gain. Authors further mentioned that it has been a great opportunity to the inexperienced younger construction professionals to gain a training and valuable experience. Apart from the knowledge gain, although some authors identify beneficial outcomes of brain drain such as adaptation to novel technology, increased remittances (Ore & Akintayo, 2023) and brain circulation (Kone & Ozden, 2017). However, the Central Bank of Sri Lanka's Annual Report 2022 mentioned that the costs of brain drain will overrun those benefits in brain gain the Sri Lankan context (CBSL, 2023). Hence, it is paramount to study the factors affecting brain drain of construction professionals amidst economic crisis in Sri Lankan construction industry.

3. Research Methodology

Qualitative research is used in the field of behavioural sciences which aims to explore the motivative factors of certain behaviors of humans (Kothari, 2004). Accordingly, this research followed qualitative approach to achieve the aim of the research which is identifying the factors affecting brain drain of professionals in the construction industry amidst economic crisis in Sri Lanka. A comprehensive literature review was conducted to review on the economic crisis and its impact on brain drain in construction industry. Subsequently, semi-structured interviews were conducted to collect data to investigate the reasons behind the brain drain of construction industry. Interviews were conducted with 15 experts covering Architects, Engineers, Quantity Surveyors (QSs) and Project Managers who migrated during the economic crisis focusing on the reasons behind the brain drain in the migrant's perspective. Further, 10 respondents covering construction company owners from both contractor and consultant firms in construction industry were interviewed to identify the unique factors within their company which have encouraged the professionals to leave the company and the country. Two separate interview guidelines were used for each interview type. The sample was selected through snowball sampling. Tables 2 and 3 presents the profile of interviewees of construction professionals migrated during the economic crisis in Sri Lanka and the Sri Lankan construction company owners respectively.

Table 2 Details of Interview	wed Migrated Professionals
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Interviewee	Previous Designation	Current Designation	Country of Current Residence*	Year of Migration
I-1	Architect	Architect	UAE	2022
I-2	Planning and Structural Engineer	Senior Planning Engineer	KSA	2022
I-3	Senior Civil Engineer	Construction Manager	KSA	2023

I-4	Project Quantity Surveyor	Junior Quantity Surveyor	Canada	2022
I-5	Senior Quantity Surveyor	Senior Quantity Surveyor	Dubai	2023
I-6	Interior Design Engineer	Design Architect	UAE	2023
I-7	Assistant Quantity Surveyor	Assistant Quantity Surveyor	UAE	2023
I-8	MEP Quantity Surveyor	Electrical Engineer	KSA	2022
I-9	Quantity Surveyor	Senior Cost Manager	KSA	2023
I-10	Quantity Surveyor	Quantity Surveyor	UAE	2022
I-11	Environmental social and safeguard officer	Sustainability Specialist	Dubai	2023
I-12	Project Coordinator	Research Assistant	Canada	2023
I-13	Quantity Surveyor	Cost Manager	UAE	2022
I-14	Contract Lecturer	Trainee Planning Engineer	KSA	2023
I-15	Quantity Surveyor	Cost Manager	UAE	2022
		*Note: [UAE] – United A	Arab Emirates. [KSA]- Kinadom	of Saudi Arabia

Table 3 Profile of the Interviewed Company Owners					
Interviewee	Designation	Years of Experience	Category of the Organisation		
I-16	Chief Executive Officer	15 years	Consultancy organisation		
I-17	Director	25 years	Consultancy organisation		
I-18	Deputy General Manager	30 years	Contractor organisation		
I-19	Director	15 years	Contractor organisation		
I-20	Director	40 years	Consultancy organisation		
I-21	Director	15 years	Consultancy organisation		
I-22	Managing Director	15 years	Consultancy organisation		
I-23	Director	13 years	Contractor organisation		
I-24	Director	15 years	Contractor organisation		
I-25	Director	17 years	Contractor organisation		

Table 3 Profile of the Interviewed Company Owners

Analysing the texts, communication materials either verbal or visual, gathered from interviews and questionnaire surveys are generally done through content analysis (Elo & Kyngäs, 2008). Further to the authors, content analysis provides a systematic way to describe phenomena and interpreting them. Hence, the collected data were analysed using the content analysis through the NVivo software. The scope of this research is narrowed down to identify the factors affecting brain drain amidst economic crisis on the construction industry of Sri Lanka. Further, the considered group of migrants in this study are the construction professionals who migrate across countries and the domestic migrants are not considered. Further, only the legal migration of those professionals is taken into account when conducting the research. Moreover, the study is limited to the migration of construction industry professionals since 2022.

4. Research Findings and Discussion

Interviews were conducted using two separate semi-structured interview guidelines with the migrated construction professionals during the recent economic crisis in Sri Lanka and construction company owners in Sri Lanka in order to collect data for the research. The following sections present research findings obtained through the content analysis using the NVivo software, along with a discussion that matches the empirical findings to existing literature.

4.1. ECONOMIC CRISIS IN SRI LANKA AND ITS IMPACT ON CONSTRUCTION INDUSTRY

When elaborating the current economic crisis in Sri Lanka, interviewees have mentioned various causes and results of the crisis and some of them highlight the timeframes and the history of the economic crisis in Sri Lanka. According to the findings, inflation and currency depreciation has been emphasised by most of the interviewees as a major aspect of economic crisis. Further, poor management of money has been significantly mentioned by the interviewees highlighting the unnecessary debts and shortage of foreign reserves. However, the findings agree with the view of George et al. (2022) on the economic crisis in Sri Lanka as identified in the literature review and Ciocca (2007) indicates high public debts, inflexible bureaucracy, diminished productivity rates and declining competitiveness as the contributing factors towards a weakly performing economy (as cited in Tintori & Romei, 2016). When digging into the impacts of economic crisis on the construction industry and the brain drain of the construction industry, two migrated professionals and three company owners stated that the construction industry is the mostly affected industry from the economic crisis. They identify the construction industry as a secondary sector and they highlighted that it began to fall with the fall of the primary sectors such as education and health sector. This is supported by Edmund et al. (2018), Jiang et al. (2013) and Azubuike et al. (2018) in their papers by drawing examples from United States of America, Australia and Nigeria respectively.

When considering the impact of economic crisis on the construction organisations, except two company owners, others elaborated the changes happened in their companies during the economic crisis. Most of them mentioned the loss of revenue due to loss of projects and project suspensions. Considerable number of company owners highlighted the possibility of bankruptcy due to the inability to pay bank loans. Further, I-17 stated that they were struggling to survive through the economic downturn and do not have the ability to expand the business. Almost all of the company owners agreed that they

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lost the qualified staff. Similarly, Edmund et al. (2018) and Jiang et al. (2013) has stated that the construction companies were severely affected by the economic crisis due to the reduced demand and the drop of construction value.

Furthermore, majority of the interviewees identified migration or mobility as a strategy to overcome hardships of economic crisis highlighting the inward remittances. However, some of the company owners emphasises that the answer is depending on various perspectives. They recognise migration as a strategy to overcome the hardships of economic crisis from the person's perspective and as a disadvantage from the country's and organisation's perspective. Nevertheless, I-10 strongly highlighted the benefit of the knowledge gained abroad to the Sri Lankan construction industry. However, As per several authors, economic crisis is a major influence on the brain drain of a country (CBSL, 2023; Gunawardena & Nawaratne, 2017; Samaraweera & Upekshani, n.d.).

4.2. WHAT IS MIGRATION AND BRAIN DRAIN?

All of the interviewees identified the term migration as changing the current residence from one place to another place including the internal migration within countries. Further, some of them highlighted various reasons for migration in their definitions. Respondent I-5 defined migration as "*People in the country move from one place to another for searching for better jobs, education and also the safety*". No interviewee has identified a specific destination, duration of mobility, legality or influence, but some of them have mentioned factors such as economic reasons which can be categorised under the forced or voluntary migration. In addition, I-16 has defined migration as "*a change of the current job, industry or the residing country*" which adds a different aspect to the definition. Further, all the interviewees identify brain drain as a sub-category of migration and as the migration of intelligent people. Further, five respondents have identified the migration as a phenomenon which is not limited to humans. They mentioned that "anyone" can be migrated including animals. However, all the definitions in the existing literature also express migration as a movement away from the usual residence for a particular time period (Ore & Akintayo, 2023; Sironi et al., 2019; Dingle & Drake, 2007).

4.3. TRENDS AND PATTERNS OF BRAIN DRAIN IN CONSTRUCTION INDUSTRY

From both the construction company owner's and migrated professional's perspectives, the identified reasons for the pattern have similar ideas. 22 number of interviewees have given reasons for the escalation of brain drain after 2020 while 10 interviewees have given reasoning for the sudden drop in 2020. Among them, most of the interviewees mentioned the economic crisis as the major reason for the huge escalation and COVID pandemic as the reason for the sudden drop. It has been proved in the World Migration Report 2022 as per the literature review (IOM, 2021). Further, a considerable number of interviewees highlighted the loss of job opportunities within Sri Lanka and the gradual boom in the foreign construction industry after the pandemic as reasons for the increase in the brain drain. Further, I-18 as a construction company owner, provided examples from his organisation mentioning that 50% of his staff had left the country because of economic reasons.

Most of the interviewees has recognised Middle East as the most favourable destination for the migrant construction professionals. Among those interviewees, majority of them have mentioned the prevailing construction boom in the Middle East countries as the reason for choosing it as the destination. Seven number of interviewees has highlighted the construction industry boom in the Saudi Arabia among the Middle East countries while I-7 indicates NEOM and EXPO 2023 projects as examples for the above fact. Further, Australia, Canada and New Zealand can be identified as the most favourable destinations for Engineers in terms of educational purposes and better living conditions. In addition, Majority of interviewees mentioned Quantity Surveyors and Engineers as the mostly migrating professions. Specially, a considerable number of interviewees have mentioned a pattern between the destinations and the profession type as well.

4.4. FACTORS AFFECTING BRAIN DRAIN IN SRI LANKAN CONSTRUCTION INDUSTRY

According to the literature review, the major push factor which motivate skilled personal to leave Sri Lanka is the economic crisis (Kularathne & Samarathunga, n.d.; CBSL, 2023; Gunawardena & Nawaratne, 2017; Samaraweera & Upekshani, n.d.). Similarly, during the interviews, the migrated construction professionals have proved the economic crisis and other factors associated with the crisis as the major reason for their decision on migration.

Almost all the interviewees agreed to the higher income as a pull factor since the economic downturn in Sri Lanka has devaluated the Sri Lankan rupee. Hence, earning in foreign currencies has become a benefit to the migrants and their families residing still in Sri Lanka. The interviewees who agreed with the favourable political climate as a pull factor, highlighted that they are not much aware on the politics of the residing country but the political stability existing in those countries has made them to agree on that factor. According to the responses and the interviewee's residing country, pull factors could vary. For instance, better working conditions and higher quality of life are not pull factors for the people who are residing in Saudi Arabia as it is a harsh and a dessert country. Some interviewees highlighted that they are working a considerable number of working hours than in Sri Lanka even under the tough and dessert climate in the Middle East countries. Further, better job opportunities are available highly in Middle East countries as most of the interviewees highlighted the construction boom prevailing in those countries. But, it is not a significant pull factor for countries like Canada and Australia. In addition, they have mentioned that the possibility for having job opportunities depends on the type of the profession as well. Further, educational opportunities are a significant pull factor for Australia and Canada while Middle East provides less opportunities for education. Further, the interviewees who mentioned the professional recognition, specifically highlighted the

recognition for the Quantity Surveying degree of University of Moratuwa. Hence, the pull factors spread for a wide range, and they depend on the destination and also the type of profession.

Regarding the push factors, almost all the factors identified are associated with the prevailing economic crisis. Without contrasts both the migrated professionals and company owners identify need for better income and the political factors within the country as major influences of migration. When it comes to the political factors, three number of company owners mentioned that political instability as the main political factor which contribute to the migration. Corruption in organisations, government institutions and politicians are also highlighted by the interviewees as push factors. Significantly, although the shortage of intellectual guidance has been identified as a push factor in the literature review, it was rejected by the majority of the interviewees and most of the migrated professionals mentioned that there was a proper guidance from the industry experts. Therefore, it cannot be considered as a push factor for migration within the Sri Lankan construction industry.

From the factors identified in the literature review and mentioned by the interviewees, both migrated construction professionals and company owners pointed out the specific limitations and challenges in the construction industry associated with them as shown in Figure 1. According to these findings, lack of projects has been mentioned by most of the interviewees from both types, but the company owners have emphasised it significantly. Migrated construction professionals significantly highlighted the lack of job opportunities as a challenge. All the interviewees who mentioned the project suspensions are migrated construction professionals. It conveys that the job insecurity caused by the suspensions of projects have let them to leave the country. Further, insufficient and lower salaries have been identified considerably by the migrated professionals and I-16 as a company owner, stated that *"We couldn't increase salaries since projects were slowed down but they were very happy with the organization culture"*. In addition, factors which are derived from the economic crisis such as instability of the industry, cash flow issues of projects and lack of investors have been mentioned by the interviewees.

Finally, when diving into the organisational level of the construction industry, eight out of ten construction company owners recognised some factors within their organisation which resulted in migration of their staff members while two of them stated that their companies are not responsible and have not provided any background for the employees to leave the country. Most of the company owners has emphasised the inability to increase the salaries as a motive factor and they stated that the professionals were not able to survive within the country with the given salary. Then, considerable number of interviewees showed the limited career advancement opportunities within their organisation as they had no much works to do due to the limited number of projects and the recession of the industry.

Figure 2 summarises the push and pull factors occurred at organisational, industry and country level that affected the brain drain of construction professionals in Sri Lanka.

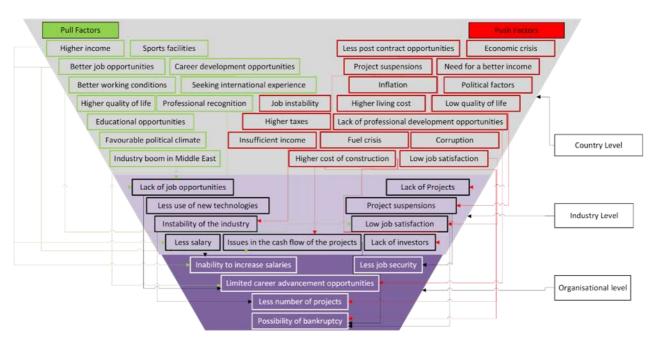


Figure 2: Factors Affecting the Brain Drain of Construction Industry in Sri Lanka

These identified factors have mutual relationships through the three levels which are country level, industrial level and the organisational level. The motive factors of the lower levels have been derived from the factors of the higher level. For

instance, inflation and higher cost of construction in the country level causes cash flow issues in industrial level while those cash flow issues cause possibility of bankrupting organisations.

5. Conclusions and Recommendations

Migration of professionals across international borders amidst the global social and economic dynamics have been a crucial phenomenon worldwide. According to most of the researchers, it has been termed as the brain drain. The flow of brain drain mostly starts from a least developed country to a developed country with a higher standard of living. Further, construction industry is a significant sector which considerably contributing to the economy of a country and as well as a labour-intensive field. Hence, it has been severely affected by the brain drain. This study explores the factors affecting the brain drain of construction industry. Sri Lanka followed by reviewing the current economic crisis and the trends and patterns of brain drain of construction industry. Sri Lanka is currently facing a critical economic crisis which has been nearly began in 2022. Crises are the disruption periods in the general functioning of a system together with the dissatisfaction on the existing practices. The economic crisis in Sri Lanka has been began a long ago and inflation and the currency depreciation can be highlighted when reviewing the current situation of the economic crisis. The major impact of economic crisis on the construction organisations, lack of projects and project suspensions can be emphasised. The pattern of brain drain in Sri Lanka has been had a sudden escalation since 2020. Thus, the professional migrants who move between countries legally, due to economic reasons for a shorter or a longer period were considered when conducting this research. Regarding the global migration, the statistics demonstrates a sudden drop in 2020 as a result of the COVID pandemic.

Similarly, the brain drain in the Sri Lanka shows the same pattern and a huge escalation since 2020. The study proved that the same pattern can be identified in the brain drain of Sri Lankan construction industry also. Further, Quantity Surveyors have been identified as one of the mostly migrating construction professionals while Middle East being the most favourable destination by the migrant construction professionals. However, it is revealed that Quantity Surveyors also choose countries such as Australia, Canada and New Zealand as their destinations for the higher education. Regarding the factors influencing brain drain, push and pull factors were analysed separately. Economic crisis has been highlighted as the major push factor for the brain drain within the Sri Lankan construction industry while higher income offered from host countries being the major pull factor. However, the pull factors vary depending on some aspects such as the destination and the type of profession. In addition, a dependable relationship between the influencing factors through the organisational level, industrial level and country level have been identified. The identified factors influencing brain drain will assist industry practitioners in effectively addressing its negative impacts. As the next step, this study will be further extended by analysing the effects of brain drain on the construction industry and exploring strategies to mitigate its impact on the Sri Lankan construction sector.

This research contributes to the existing body of knowledge by providing a targeted analysis of brain drain in the Sri Lankan construction industry, a sector that has been notably underexplored within the context of economic crises. Unlike prior studies that predominantly focus on brain drain in other sectors or in developed country settings, this study identifies unique push and pull factors specific to construction professionals in a developing country undergoing economic instability. By using a qualitative approach to capture the experiences of both migrated professionals and industry stakeholders, this study deepens the understanding of how economic crises can impact sector-specific labor migration. The insights generated can inform policies to mitigate brain drain in similar contexts, offering a valuable foundation for future research on sectoral migration trends under crisis conditions.

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