



**THE IMPACT OF FREQUENT TAX REFORMS ON
CONSTRUCTION INDUSTRY IN SRI LANKA**

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ABSTRACT

The influential and the fast-spreading nature makes the construction industry a critical driver which foster the economic growth of a nation. Furthermore, it is evident that the economic growth is highly sensitive to the tax regimes and the tax policies. Correspondingly, taxation is regarded as an aspect which significantly impact the construction industry and the economic stability. The sudden and frequent nature of the current Sri Lankan tax practices are challenging the construction industry in many ways. Therefore, when reforming tax systems, the indirect and direct impact on the construction industry should be considered to minimise the effect on the entire economy. Thus, the lack of research on the impact of tax fluctuations on the construction industry has led this research to achieve the aim of investigating the direct and indirect effect of tax reforms on the construction industry.

The qualitative research approach was adopted for this research by using semi-structured interviews. Sixteen Semi-structured interviews were conducted from a sample selected with purposive sampling technique. The collected data were analysed using the code-based content analysis method. Through the findings it was evident VAT, income tax, withholding tax, NBT, CESS, PAL, PAYEE, CIFGL and stamp duty are the taxes which significantly impact on the construction industry. Further, the findings of the research revealed the current Sri Lankan tax

practices are lacking the salient features of a proper tax regime like certainty, predictability, stability, and transparency. Inadequate national policies regarding taxation were founded as one of the significant shortcomings. Furthermore, it was evident that even though the tax reforms were done aiming at improving the construction industry they have impacted the industry in an unseen and indirect manner. Therefore, the knowledge gap of the policymakers on the construction industry and the construction supply chain member's knowledge on the financial aspect of the tax systems should be improved to mitigate this issue. Also, it was found out from the research that different aspects of the construction industry like labour supply, material supply, investment, and cost are impacted due to sudden tax reforms. Further, this research presents suggestions that can be incorporated when reforming tax systems to overcome the various issues faced by current tax practices.

Keywords – Construction Industry, Tax Reforms, Tax Policies, Tax Systems, Sri Lanka

1. INTRODUCTION

The studies of Ozkana and Ozknab (2012) point out that the construction industry is the critical driving sector of any country since it has backward and forward linkages with more than 200 sub-industries or sub-sectors. According to the Central Bank of Sri Lanka (2019) the shutdown in the construction industry caused the other industrial activities to slow down in 2018. Similarly, the research findings of Rameezdeen and Ramachandra (2008) state that the construction industry and the economy of the country has a close relationship. The studies of Ibrahim et al. (2010), further reinforce this fact by stating that the construction sector is a critical section in the nation's economy since a country cannot grow if there is no infrastructure build to spur the economy. Further The literature findings of Samari, Esmaeilifar, and Shafiei (2014) state that the CI, which encompasses a workforce of 120 million people, contributes 8–10% of the global GDP by producing an annual output of US \$4.6. Osei (2013), point out that the construction industry significantly contributes to the industrial output and the Gross Domestic Production (GDP) of a country.

According to the Annual Report (2018) issued by the Ministry of Finance state, due to the declining nature of construction, and mining and quarrying subsectors, the overall economic growth dropped to 3.2 percent in 2018 compared to 3.4 in 2017. The report further states, this is because the construction industry accounted for 6.8 percent of Gross Domestic Production (GDP) in 2018.

It is apparent from the findings of Osei (2013) that economic growth drives the construction sector positively by filling the infrastructural gap. Similarly, the research of Shehu et al. (2014) points out that the construction industry also encourages economic growth and development. Padovano and Galli (2007) state that high marginal tax rates negatively correlate economic growth, hence it is evident that tax changes which affect economic growth also affect the construction industry. Correspondingly it is evident from the studies of De Silva, Rajakaruna, and Bandara, (2005), that the construction industry in Sri Lanka is sensitive to government policies and tax policies.

Also, the findings of Mbusi, Mbiti, and Wanyona (2015) highlight that tax rate reduction by the government would boost the economy. The findings of Amirthalingam (2010) emphasise that most of the countries are frequently reforming tax structure to formulate a better tax policy with a view of increasing tax revenue. Also, the findings of Buchanan and Allan (2000) exhibit the importance of tax system to the construction industry by pointing out that tax policy and practice play a significant role in structuring construction employment. The findings of Briscoe, Dainty and Millett (2000) point out that the impact of UK government policy, which caused self-employment of the construction sector to shift in to direct employment. Further, the studies suggest that there are several practical issues such as high compliance cost, when implementing tax systems like Goods and Services charge to the construction industry (Sui Pheng & Loi, 1994).

There are several types of research carried out regarding the impact of tax reform on the economy in general (Yagen, 2015; Dale & Yun, 2002; Aaron & Gale, 1996; Yang, 2016). Even though there is less literature finding on the impact of tax reforms in the construction industry. Therefore, this study aims to identify the direct and indirect impacts of tax reforms on the Sri Lankan construction industry. Hence, this study is organised as follows: first, a literature review is presented on different taxes systems, which affect the cost of the construction industry and then direct and indirect effects imposed by tax changes on the construction project. Then justification of methods employed in collecting data. Finally, the results of the study are discussed with an outline of the implications for construction companies, and policy makers.

2. LITERATURE REVIEW

This section discusses literature review on the unique nature of the construction industry, the tax policies and practices related to Sri Lankan construction industry, and the effect on several aspects of the construction industry because of tax changes.

2.1 The unique nature of construction industry

The construction industry is exceptionally competitive (Agapiou & Notman, 1998). According to Abenayake (2008), the construction industry covers a sophisticated and comprehensive field of activities involving numerous practical skills and conditions, which vary considerably from one project to another. Furthermore, the research of Dubois and Gadde (2002) emphasizes the complexity of the construction industry. The findings of Zou, Zhang, and Wang (2007) introduce, long period, complicated processes, abominable environment, financial intensity and dynamic organisation structures as significant features of the construction industry. The studies of Ozkana and Ozknab (2012) point out that the construction industry is the critical driving sector of any country since it has backward and forward linkages with more than 200 sub-industries or sub-sectors. Also, the literature findings of Osei (2013), point out that the construction industry significantly contributes to the industrial output and the Gross Domestic Production (GDP) of a country. Therefore, whatever happens to the construction industry, directly and indirectly, affects the other sectors and ultimately to the economy of the country (Lean, 2001; Rameezdeen and Nisa, 2006).

2.2 Tax systems and policies related to the Sri Lankan construction industry

According to Zagler and Durnecker (2003), tax structure has direct and indirect influences on the construction industry. Thereby, construction industry is considered to be one of the most complex, fragmented, schedule and resource-driven sectors (Memon, Rahaman & Aziz, 2011). Hence, it is essential to carry out a comprehensive analysis about the tax systems and policies, which relates to the CI. Sri Lankan tax system is mainly divided into direct tax and indirect tax (Sri Lanka Tourism Development Authority, 2019). The findings of Amirthalingam (2010), emphasise the main aim of a tax reform is to formulate a better tax policy in the country. Correspondingly, the Fiscal Management Report (2019) states Sri Lanka has structured the tax system in a simple, equitable and efficient manner. Table 1 presents tax systems in Sri Lankan construction industry based on extensive literature findings.

Karim, Bouzahzah, and Touzani (2020) suggest that policymakers should get to know the insights of the country's economic situation before reforming the tax structure. Additionally, Slemrod and Gillitzer (2014) state that the complexity of a tax system makes it harder to reform. Similarly, Briscoe, Dainty, and Millett (2000) point out that implementing a new tax scheme would rise uncertainty in the construction industry.

Table 1- Recent Tax Policy Changes

2013	<ol style="list-style-type: none"> 1. Registration Threshold on VAT and NBT was increased to Rs. 12 million per annum. 2. Introduction of VAT on wholesale and retail trade and liable threshold of registration was not less than 500Mn (including exempt supplies) for any consecutive three months in a year. 3. The threshold concerning partnership was increased to Rs. 1,000,000
2014	<ol style="list-style-type: none"> 1. The maximum rate of income tax applicable to the employment of qualified professionals 16% 2. The liable threshold for registration of wholesale and retail trade reduced to Rs. 250 million
2015	<ol style="list-style-type: none"> 1. Threshold on VAT and NBT was increased to Rs. 15 million per annum and the rate of VAT reduced to 11% 2. The liable limit for registration of wholesale and retail business reduced to Rs. 100 million 3. Fixed qualifying payment for employees was increased up to Rs. 250,000 4. The maximum income tax rate applicable to employment income for every employee was limited to 16% 5. The imposition of excise (special provision) Import or Manufacture of Liquor, Cigarettes and Custom Duty on Motor Vehicles instead of VAT and NBT 6. Super Gain tax was introduced as one-off payment, for any individual, company or group of company who has earned profits over Rs. 2,000 million in the tax year 2013/2014 will be liable to pay 25% of their profit.
2017	<ol style="list-style-type: none"> 1. Inland Revenue Act No.24 of 2017

Source: Inland Revenue Department Sri Lanka

The findings of Gale and Samwick (2014) suggest that even well-designed tax policies do not have the potential to positively impact each and every industry in the same manner. The findings of Simo and Edwards (2008), exemplify that formulation of successful tax reform has to be followed by a complex process. This fact is further braced by the research of Owens (2006), which states that even though maintaining an ideal tax system is a challenging task, it is a continuous process of tax policy makers to constantly adapt tax systems to take account of changing economic, social and political circumstances.

2.3 Effect of tax reforms on the construction industry

The findings of Zagler and Durnecker (2003) emphasize that level and the structure of taxation can influence the long-run growth of an economy. Furthermore, the authors point out that taxes exhibit an indirect effect on economic growth; hence, the taxes may finance growth-enhancing

government expenditures (Zagler & Durnecker, 2003). Correspondingly, the findings of Turnovsky (1997) highlight that by introducing a more flexible tax scheme can balance the growth path of the economy. Similarly, Kneller, Bleaney, and Gemmell (1999) point out the structure of taxation can have a significant impact on economic growth. Therefore, Karim, Bouzahzah, and Touzani (2020) suggest that policymakers should get to know the tax system that is least favourable to economic growth before reforming the tax structure.

Accordingly, the literature findings emphasise that construction materials, labour supply, cost and investment are significantly affected due to tax reforms. The increase of construction material and labour price is a significant reason for frequent cost overruns in the construction industry (Oghenekevwe, Olusola, & Chukwudi, 2014; Perera et al., 2014; Chan et al., 2011). Correspondingly, Ayodeji (2011) illustrated that reduction of tax would result in cheaper construction materials and additional employment opportunities.

Furthermore, Devereux (2004) states that lower tax rate typically increases the incentive to invest. Nwannekanma (2017) states that the increase of these construction costs would lead to unemployment, lack of incentive for investors, skill reductions, and reduction of innovations. Adedokun (1999) determined that construction costs will increase, when taxes are increased, hence, contractors and material manufacturers will feel reluctant to commit themselves to additional capital expenditure on materials, labours, plants and equipment. Adi and Ni'am (2012) highlight labour is one of the significant elements in continuity and implementation of construction projects. Correspondingly, the literature findings of Mbusi, Mbiti, and Wanyona (2015) elaborate that proper government spending and tax policies can create employment. This fact is further elaborated by the findings of Teulings (2014) and Mbusi, Mbiti, and Wanyona (2015) which state that proper government tax and spending policy can avoid the reallocation of construction labour.

There are researches on factors affecting construction cost (Memon, Rahaman and Aziz, 2011; Azhar et al., 2008; Rahaman, Memon and Karim, 2013; Subramani, Sruthi and Kavitha, 2016). Some researchers address labour costs (Balushi & Raveendranath, 2015) while some researches focus on construction investment (Ozkana, Ozkanb, & Gunduzc, 2012) and the material cost (Rahaman & Memon, 2013). Even though there are less literature findings on impact of tax reforms on all of these aspects related to the construction industry. Since there is a literature gap it is essential to examine the effect of tax changes on the construction industry.

3. METHODOLOGY

Kumar (2011) elaborates that a research methodology is piloted to identify the systematic process which can be used to respond to the research problem and

questions. The qualitative approach can be incorporated when an in-depth analysis of the subject area is required (Thomas & Magilvy, 2011; Yin, 2009). Similarly, Yin (2013) suggests that the qualitative approach is suitable for the research, which depends on the perspectives, views, and beliefs of a group of people. The opinions, ideas, knowledge, and views of different key players in the construction supply chain are subjective. Hence, the qualitative research approach was selected in this study. Fink (2003) defines that the qualitative survey is suitable to explore the experiences of people. Furthermore, Yin (2019) states that the appropriate research strategy depends on the nature of the research question. Based on the literature gap identified in the literature review the research question of this study is “how does the construction industry is affected by tax reforms”. Hence this research is required to gather opinions of key players of the construction industry. Fusch, and Ness (2015) state that an appropriate data collection method should be adopted after considering the nature of the research approach. Liamputtong (2009) elaborates that interviews are the most common data collection method in a qualitative approach. Cohen and Crabtree (2006), point out the degree of freedom in semi-structured interviews to express opinions rather than restricting to boundaries of a structured questionnaire as the main advantage of these types of interviews. Therefore, semi-structured interviews were incorporated in this research as the primary data collection.

Kapur (2017) states that successful research depends on the selection of the sampling method. The experiences, knowledge, and attitude of the clients, contractors, manufacturers, and suppliers of the supply chain are required for this research. Hence, a sample consisting of the experts of each field should be chosen as the sample. Therefore, the purposive sampling method was used to select the respondents to collect data. Also, the author stated that when deciding the size of the sample, parameters of interests of research should be considered (Kothari, 2004). Given all the facts cited above, four (4) respondents representing clients, contractors, manufacturers, and suppliers of the construction supply chain, which sums up to 16 respondents are chosen as the sample. The sample consists of chief quantity surveyors, project managers, chief accountants and finance managers and among them ten respondents had more than 20-year work experience and balance had more than 10-year work experience in the construction industry.

4. RESULTS AND DISCUSSIONS

The findings of the research are elaborated from the following sections.

4.1 Taxes which affect the construction industry

16 out of 16 respondents agreed that all of the taxes found in the literature have a direct or an indirect impact on the construction industry. It is apparent

that the impact depends on the nature of the tax. If the tax is transferable, the impact can be transferred. Therefore, VAT, CESS, PAL and stamp duty can be transferred. On the other hand, income tax, withholding tax, NBT and PAYEE cannot be transferred.

13 out of 16 respondents agreed that the current tax system in Sri Lanka is complex except for 2 respondents, who stated the only issue with the tax system is that it does not address the construction industry differently, therefore if there is a specific tax system dedicated for the construction industry it would be better. Moreover, 4(4) respondents among clients stated that the taxes related to the construction industry are of a complex nature, with the purpose of protecting various infant industries and products related to construction industry (ex: steel bars, tiles, PVC, etc.). Furthermore, 10(16) respondents pointed out that the duplicating nature of taxes like NBT is the reason for the tax system to be complicated. Similarly, 13(16) respondents highlighted that the current tax system is highly unpredictable since many indirect impacts could be experienced, when taxes get reformed. Similarly, 3(4) respondents among suppliers pointed out that due to the complex nature of tax systems, there are disadvantages and advantages. Further 4(4) respondents among suppliers emphasised that these disadvantages peruse supply chain members to avoid paying taxes. Correspondingly, respondents pointed out it is hard to sell for a person, who is not paying tax no matter what cost leadership or strategies are followed. Similarly, 10(16) respondents elaborated that the unattractive and inefficient nature of the current tax system peruses the supply chain members not to pay taxes. Therefore, 16(16) respondents further highlighted tax system should be simple and should trace everyone. Furthermore, 12(16) respondents pointed out that taxes are not equal for every supply chain member, some are entitled to unmerited tax benefits, therefore, the competition is not equal. Moreover, 4(4) respondents among manufacturers emphasised the need for a process to charge taxes from all the supply chain members and further pointed out that if the tax burden is distributed among every supply chain member, the tax rates also could be brought down.

Moreover, 16(16) respondents highlighted the need for a national policy for tax and further stated that the current tax policies differ with the change of political agendas, therefore, it would be better if long-term and short-term policies are incorporated. Similarly, 16(16) respondents illustrated, since there is no proper tax policy, people have no trust in the tax system. Even if a favorable tax change comes, the people may be reluctant to pay much attention to that. Furthermore, 3(4) respondents among manufacturers stated that the current taxes are hard to standardise and not straightforward, therefore the way of calculating various tax systems is complex. Similarly, 3(4) respondents among the suppliers emphasised since there are numerous taxes,

the current tax system is complex, even though, by the recent tax reforms, most of the tax rates are brought down, which has impacted the construction industry favorably. On the contrary, 13(16) respondents pointed out that taxes should be there but they should be reasonable.

4.2 Direct and indirect impacts of tax changes on construction projects

The respondents emphasised that if the impact of tax reform directly affects the principal construction process that impact can be identified as a direct impact. On the other hand, if a certain tax reform affects the core construction process in an indirect manner, such impacts are regarded as indirect.

Table 2- Direct and Indirect impact of tax changes

Direct Impact	Respondents (16)
Subsequent claims could happen because of the initial planning is challenged	15
Disputes and negotiation procedures could happen during the construction phase	16
Claimable taxes also have to be absorbed to cost due to tax liable threshold changes	14
Impact on temporary cash flow	14
The quality of the construction project could be compromised	15
Indirect Impact	
Complications when differentiating tax components from rate build up	15
High compliance cost when tax systems constantly change	16
Construction professionals would take time to adjust when tax changes happen	13
Downsizing the labour force could happen	13
Impact on distributable profit	13

Source: Based on survey data

16(16) respondents agreed that there are direct and indirect effects on the construction industry because of tax reforms. Furthermore, 13(16) respondents pointed out that lower tax rates are generally favorable to the CI.

Correspondingly, 3(4) respondents among clients emphasised with the reduction of tax rates the cost of construction inputs and eventually the decisive construction cost would diminish. The argument of one of the clients among respondents was *“when such adverse tax reforms happen a shutdown, an increase of the contract period or downsizing of the labour force has to be done”* since the project will not be able to complete with the planned budget. On the contrary, 13(16) respondents argued that temporary cash flow is significantly affected by tax reforms. Even though 3(4) respondents among manufacturers underlined this effect on the cash flow is gradual. 14(16) respondents pointed out that the impact of tax can be mitigated through changes in legislation clauses. Correspondingly, one of the respondents among contractors described *“some projects are silent in this matter and in such situations the impact is high”*. A contradictory argument was highlighted by a respondent among clients, this mechanism would not account for tax escalations, *“either from hidden taxes because of changes in HS codes or restricting of certain material and imposing different taxes that come through gazettes and circulations”*. Even though 13(16) respondents viewed that regardless of the fact that this mechanism would account for tax changes differentiating the imbued tax component from the rate breakdowns is challenging.

14(16) respondents pointed, with frequent tax reforms the particular inside tax system of a construction company has to be adjusted which escalated the compliance cost. Further 13(16) respondents explained that the government tax system incurs an extensive time to get adjusted accordingly the tax reform. Moreover, 3(4) respondents among clients argued that an additional cost has to be incurred to interpret a newly introduced tax. 3(4) respondents among the clients argued that distinguishing a tax which is comprised with in the rate is complicated. 13(16) respondents further highlighted that several practical issues had to be faced when differentiating NBT component from rate build ups with the recent reforms. Furthermore, transferable taxes becoming a cost because of tax evasion was identified as another impact. 3(4) respondents among suppliers emphasised that since taxes like NBT and withholding tax cannot be transferred if one party evades paying such taxes, other party has to bear it up as a cost.

Moreover, 14(16) respondents highlighted that construction supply chain members have to encounter several complications with the variation of tax liable threshold. 3(4) respondents among clients agreed to this view since supply chain members will fail to set off input VAT against output VAT if excluded from tax registration threshold. On the contrary, 3(4) respondents among contractors pointed out since VAT unregistered supply chain members do not include VAT components in price, would gain an unfair advantage. Moreover, 3(4) respondents among clients viewed that competitiveness issues

during competitive tendering could occur if supply chain members keep a high margin to bear up the effects of tax reforms.

4.3 Impact of tax reforms on various aspects of construction projects

Respondents highlighted, construction materials, labour supply, cost and investment are significantly affected due to tax reforms. Thus, based on respondent's views, the impact of tax reforms on these aspects of the construction projects are discussed in the following sections.

4.3.1 Impact on construction material

16(16) respondents agreed that there is a significant impact of tax changes on material supply. Accordingly, 12(16) the respondents argued that the impact of a tax contrition material depends on the ability to transfer that tax to another party. The respondents further highlighted that because the current tax practice does not trace entire supply chain members, some small-scale local suppliers, who are not registered for tax generally incorporate the tax to the price and this makes it impossible to claim those taxes. 4(4) respondents among clients viewed that the impact of a tax reduction or an exemption is on the temporary cash flow. Furthermore, 12(16) respondents highlighted that if tax rates excessively increase, complicated situations like price rescheduling and cash forecast issues have to be encountered. On the contrary, 13(16) respondents pointed out generally, when tax is reduced, the material costs also reduce accordingly, and because of this favorable nature, the selection pool and the verity of the suppliers would increase as well. 3(4) respondents among contractors argued that if pre ordered large quantities of materials are available, the expected price reduction of tax reforms would not occur.

The argument of some of 3(4) respondents among suppliers was that the impact of tax change on materials is determined by price escalations. Moreover, 10(16) respondents highlighted that practical issues like outdated nature of BSR, lack of knowledge of central bank professionals, who is responsible for preparing the indices about the construction industry and the excessive time to prepare indices could be root causes to increase the impact on materials. Furthermore, the respondents pointed out that if the sample used when preparing escalations does not include a category of materials, which is overpriced due to incorporating the tax component by the above mentioned non-tax liable suppliers, it would result in increased material price. 14(16) respondents agreed that the effect of tax changes on construction material significantly affects, when importing. Accordingly, 16(16) respondents highlighted that custom duty, CESS, and PAL as the main taxes that affect imports. Moreover, 4(4) respondents among suppliers pointed out, in Sri Lanka, most of the construction materials are imported since taxes are higher compared to other countries. With regard to this view, 3(4) respondents

among contractors argued that the suppliers would be reluctant to import goods under an unstable and high tax regime. Furthermore, respondents stated it is a known fact that if a price of a material is increased by a substantial amount, the demand for it would be lower, whereby the suppliers would be forced to supply the goods to the customers at an increased price. With regard to all the above findings, it is apparent that the tax reforms have a significant impact on construction material supply.

4.3.2 Impact on construction labour

16(16) respondents suggested that the impact of tax on labour supply is not significant and it is of a rather indirect nature. Furthermore, the respondents identified that NBT, VAT, PAYE, and income tax have an indirect effect on labour supply. On the other hand, 16(16) respondents suggested that withholding tax has a direct impact on labour supply. Correspondingly, (4) respondents among clients highlighted, increment of withholding tax would persuade the suppliers to withdraw since percentage deduction from the cash flow would be high. Furthermore, 13(16) respondents pointed out that labours will demand a higher remuneration with tax rate increase. Therefore, the contractors will have to increase the wage, which would ultimately impact the construction cost. The respondents extended the argument further by stating that labour would be naturally louvered to find remuneration in an environment with low income tax rates. It is apparent with regard to all the above mentioned facts that if there is a strict and unsettling tax policy in a country, the labour supply would be directly affected.

4(4) respondents among clients agreed that neither local nor foreign labour supply is affected due to tax reforms since generally the local labour supply depends on other trends like agriculture and the weather the foreign labour supply is affected by the regulations of the country. 16(16) respondents agree to the fact that through tax concessions the cost- effectiveness of labour supply can be optimised. Even though 12(16) respondents expressed a contradictory view since, in some projects, there are specific terms that foreign labor should be incorporated, therefore, in such projects, the impact on foreign labour supply is significant. Moreover, 3(4) respondents among the suppliers argued, labour-oriented contractors as a party, who significantly affected due to tax reform. The respondents highlighted the barrier, which would be imposed to carry out the project with a constant labour price as the reason. Furthermore, 12(16) respondents emphasised, labour suppliers would be reluctant to supply labor for construction, if the tax policy is not favorable and is uncertain. The respondent further emphasised, if the tax policy is not consistent throughout the project, the suppliers will be unable to supply labours for the same price agreed before and even the labour force would be scared in an industry with such tax complications.

4.3.3 Impact on construction cost

16(16) respondents agreed that the construction cost has the most significant effect of tax changes. Accordingly, respondents emphasised that the impact on construction cost depends on the ability for that tax to be transferred. Furthermore, the respondents further stated that if a tax cannot be transferred it has to be absorbed to the cost, which results in the cost component of that particular supply chain member to be increased. Therefore, respondents suggested that tax change directly or theoretically does not affect the construction cost. 4(4) respondents among clients exemplified that reduction of certain taxes like VAT and NBT might decrease the construction cost. The respondents further argued that problematic situations have to be encountered, when a tax like NBT is reformed since it is a tax, which is included in the rates. 12(16) respondents highlighted that the impact of tax changes on construction cost depends on the incorporation of changes in legislation clause and the extent that tax reform is represented by price escalations. Therefore, the practical limitations of the escalation making process apply to this context as well. Correspondingly, 3(4) respondents among contractors argued that the cash flow of supply chain members are affected during the time it takes to prepare indices. Furthermore, respondents suggest, there are some taxes that does not come through legislation but incorporate from circulations. Similarly, 3(4) respondents among suppliers highlighted there are some tax changes that are not yet enacted but brought with a paper notice. Therefore, these kinds of taxes cannot be claimed under changes in legislation clause.

Furthermore, 16(16) respondents suggest the construction cost depends on how the end-user of supply chain is affected by tax reforms. 3(4) respondents among supplier's view that the manufacturers generally transfer the impact of most of the tax reforms to the suppliers, which leads the suppliers to transfer the impact to other supply chain members. Moreover, respondents suggest that the impact on construction cost depends to the extent the tax policy traces the supply chain members. 13(16) respondent further viewed that since withholding tax is a tax, which has to be set off by income tax and if the sub-contractors are not paying taxes, there is no possible way for that sub-contractor to recover that tax. Therefore, there are instances, where the contractor has to absorb the withholding tax component. 3(4) respondents among suppliers agreed that the construction cost is likely to escalate with the tax rates. Furthermore, respondents emphasised the impact on the other aspects of construction ultimately reflects on construction cost. 12(16) respondents further exemplified, in a measure and pay contract, the client has to bear up the construction price increments resulting from tax reforms. In such situations the client will be forced to change a part of the project by bringing up value engineering proposals or has to downsize the labor force.

Therefore, it is apparent that the impact of taxes on construction cost, material supply and labour supply are interrelated.

4.3.4 Impact on construction investment

16(16) respondents identified construction investment as an aspect that is significantly impacted due to tax changes. Similarly, 3(4) respondents among the suppliers pointed out that taxes like withholding tax, which affect interest has a significant impact on investment. Accordingly, 14(16) respondents emphasised the construction industry is a highly competitive and low-profit margin industry, since if suddenly the tax regime gets changed, the people will be demotivated to invest. Similarly, 3(4) respondents among the clients highlighted that if tax rates are low in a certain industry the investors transfer their funds to that industry. On the other hand, if tax rates are high in the country, the investors invest in other countries since they will not get the expected benefits from the investment. Furthermore, 13(16) respondents pointed out that if tax rates are high, the demand for construction would go down, therefore, the investors will not get attracted to invest. 3(4) respondents among the contractors pointed out, if there are more taxes, people will get discouraged to invest in construction. Furthermore, 16(16) respondents pointed out tax reform should be in a friendly manner to get a better return for people, when investing. Furthermore, 3(4) respondents among the contractors described that if the national policy and tax structure is not stable the foreign direct investment would get affected. Correspondingly, 14(16) respondents elaborated that if the investment does not come, the employment in the construction industry would get decreased dragging the entire economy to a depression. Finally, 13(16) of the respondents explained that not only the above-mentioned significant aspect but also every aspect and every person of the construction industry is affected by tax changes. Thus, the magnitude and the manner it affects differs from one supply chain member to another. The magnitude of impact depends on the supply chain member whether the impact could be mitigated or not.

5. CONCLUSION

The aim of this paper is to identify the indirect and the direct effect of sudden tax reforms on the construction industry. This study was carried out in Sri Lankan construction sector with 16 interviews of clients, contractors, suppliers and manufacturers. The findings of the semi-structured interviews identified the taxes, which affect the construction industry as well as the direct and the indirect effect on several aspects of the construction industry in terms of construction materials, labour supply, construction cost and investment. The findings highlighted that the main reason for the negative impacts of tax reforms on the construction projects was the current tax system does not account for the requirement of the industry. Furthermore, the findings

emphasised that even though the tax reforms seem favourable to the industry they have resulted in many other indirect aspects. Similarly, it was evident that the composite effect on construction material, labour and investment finally reflects on the construction cost. The essence of these findings was centered on whether the changes in legislation are incorporated or not. If this mechanism is incorporated most of the direct impacts on construction cost can be mitigated. Even though the study points out there are some complicated instances that even this clause does not affect. Therefore, the need for a better and stable tax culture was emphasised further from these findings. According to the research findings, it is apparent that there is a huge gap between the financial aspect behind taxation and construction. This is because most of the policymakers are not aware of the insights of construction while most of the construction experts are unaware of the economic aspect behind taxation. Therefore, this study attempts to bridge up this gap by identifying different tax systems' impact on the construction industry, drawbacks of current tax practices and direct and indirect impact of sudden tax reforms on the construction industry. Further this study can be utilized by industry practitioners to bridge up the gap of having lack of knowledge regarding the applicable tax systems to the industry. Similarly, the industry practitioners can grasp the maximum out of the taxes and reduce the effect of tax avoidance which would avoid other supply chain members being burdened with unnecessary taxes. Similarly, this study can be utilized by industry practitioners to act accordingly in situations which affect the construction industry in direct and indirect manner and take precautionary measures to mitigate such effects. The policy makers also can get an idea through this study of the unseen effects of tax reforms on construction industry when reforming taxes.

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