

Legal Sanction of Construction Projects

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Abstract

The projects and implementer contractors in Sulaimaniyah area sometimes faced to the legal sanctions due to several reasons, like quality control, safety, health, security, financial, the legal aspects of the contract and the delay in the implementations or change in the design of the projects during the implementation of the projects which is the most frequent and important reason that happen in the projects and causes the sanction of the parties either contractor or the employer staff , , this study conducted to define the type and the responsible persons of the sanctions, and then to reduce or prevent the reasons that causes' sanctions, therefore particularly it was focused on the reasons that have related to the Iraqi General Conditions Contract (IGCC) gaps, which is all the contracts depends on, and signing the contracts accordingly. There are some items in the IGCC indicated the fault of the contractor and severe penalty that causes sanction of the contractor specially the item that related to the delay of and over passing the time scheduled duration. Those items were sometimes caused bankruptcy of the contractors during the in implementations of several constructional projects. There were some characteristics and parameters have direct effects on the variation orders and that changes, but the IGCC did not specialized any item for sanction with the responsible persons.

This study was focused on the reasons that have related to the legal aspects, specially the sanction of the contractor and the faults of the designer which goes straight without taking any legal action against the Engineer. Therefore tried to collect information and indicate characteristics to help or facilitate to trying to decrease the delay, minimize and prevent the sources and making suggestion to modify that items that have affect on the delay of the projects in design and implementation stages of the projects and finally have effect on the sanction of the contractors and the designers. The data collection for this study depended on reviews which collected from various projects in constructional fields, some informationn were collected from the actual implemented projects and other some from the experience of contractors and engineers that have implemented projects and faced to the delay and suffered from the side effects of the variations during the implementation of the projects, in

other hand there are some other different causes also has effects on the delaying and sanction like financial causes, quality control, risk controlling safety and health that causes sanction of the contractors and designers.

Keywords: Constructional projects contract, Contractor and designer sanction, Iraqi general contract conditions, Legal aspects, Punishment, Reasons of variation order

1. Introduction

Taking legal action against any faults with any clients is very necessary to manage and control the quality of the work and monitoring the time schedule during or after implementation of the projects this legal action called sanction of the contract. This study focused on some items in the IGCC that have very severe sanction against the contractor due to his faults and some items that had not appointed any sanction or action against employer clients, specially the faults of the designer which causes variation orders in the design and delay in projects and causes elapsing the time from the planned time scheduled duration.

There are many different reasons causes sanction, moreover there are various stages occurring mistakes and faults, each stage have its own reasons and characteristics as classified below:[1]

Stags that occurs mistakes and faults with or without sanction in projects as detailed below and shown in Fig 1.

1. Forecasting and budgeting stage.
 - a. Finding a suitable project to be match with the budget and necessity of the project for the selected area.
 - b. Getting necessary routine approvals.
 - c. Performing phisability study
2. Planning design and scheduling stage.
 - a. Planning for the project
 - b. Time scheduling.
 - c. Selecting a suitable location, land and area
 - d. Selecting a suitable designing staff
 - e. Considering safety and health for all the stages of the project.
 - f. Considering the risks and planning for the risks.
 - g. Selecting a suitable method for implementation like tendering, direct implementation.
 - h. Selecting a liable contractor or staff to perform the job.
 - i. Consideration of insurance
 - j. Quality control consideration.
 - k. Financial capability of the company implementer.
 - l. Designing the project

3. Implementation stage

- a. Planning for implementation the project
- b. Monitoring the implementation and observation the project by the employer.
- c. Selecting a suitable implementation staff.
- d. Selecting a capable and suitable grade and special contractor.
- e. Considering safety and health for all the stages of implementation.
- f. Considering the risks and planning for decreasing the risks.
- g. Consideration of insurance.
- h. Type of the contract between the contractor and employer.
- i. Financial capability of the company implementer.
- j. Obey to all items of the general conditions of contract by both parties.
- k. Paying the payments according to the time schedule

Several of the projects in Sulaimaniyah, were faced to temporary stopping and arranging the variation orders for the changes due to the availability of deficiencies in the design in the contract, therefore most of the projects to be stopped from the beginning for several months.

For identifying the exact reasons of the delay, the old projects that had been completed should be taken in to consideration and study. Therefore this study depended on questionnaires review, among engineers that have actual experience about the site supervision and implementation of constructional projects, those who have experience about the contractors that actually suffered from delays and their projects were delayed because of different reasons. The result of questionnaires had been collected and tabulated then through using some statistical equations have been analyzed and summarized in Table 1 and 2, then accordingly explained the effects of the related characteristics as shown in the Figure 2 and 3 [2].

According to the Iraqi law sanctions had been specialize and applied for all types of the faults according to the size and their circumstances, below some of the sanctions that related to the constructional works.

The authority has the full power to face the contractors and undergo in the following fields:

First: The authority of observation and direction. The employer has the authority to make continuous observation and direct the contractor from time to time.

Second: The authority of modification of the contracts. The employer has the authority to modify the contract whenever or wherever needs modifications.

Third: The authority of sanctions of the contractor: The employer has authority to apply three types of sanctions:

A. Financial Sanctions;

- a. Includes the penalty: for the delay beyond the deadline of the contract.
- b. Compensation for damages:
- c. Confiscation of contract

B. Nonfinancial Sanctions ore obligatory.

- a. Put the hand on the site.
- b. Purchase on contractor's account.
- c. Withdraw the work from the contractor.

C. Termination of Contract: either with or without fault of contract.

Fourth: The authority of termination of the contract.

Types of termination of Contract:

- A. Abolition by agreement.
- B. Judicial dissolution of the contract.
- C. Administrative termination of Contract [3].

2. Literature Review:

1. According to the FIDIC, various types of sanctions applied to the contractor faults, but there were not applied any sanction towards employer's clients. Two types of sanctions applied on contractor, financial and personal sanctions, the financial sanction applied for delay, performing unqualified works, withdraw of works, confiscation of insurance, while the employer delays the contractor payment without having power to take any action against the employer, and the routine system let the works complex and difficult to implement. The personal sanctions prison of the contractor on the site [4].
2. According to the General Contractors Conditions (GCCCI), various types of sanctions applied to the contractor faults, but there were not applied any sanction towards employer's clients. Two types of sanctions applied on contractor, financial and personal sanctions, the financial sanction applied for delay, performing unqualified works, withdraw of works, prison of the contractor on the site, while the employer delays the contractor payment without having power to take any action against, or due to the routine the works would complex and to be difficult to implement [5]. While only some limited small administrative regulations applied as sanctions on the employers clients like (warning letter, rebuke letter, notification letter, transfer between the locations, unpaid working.)[6].

3. The study mentioned all the types of sanctions towards the contractor, the designer engineer and any person whom start construction without license, decreasing the routine system and time limitation for the to perform any approval documents, sanctions to be applied on the contractor that implement the projects with lack of quality or not match the specifications, in addition the insurances, but the research never mentioned the sanctions towards the employer's faults [7].
4. The Law applied the sanction towards the responsibility on both contractor and the architectural designer engineers, if the whole building fails or a part of the building fails during first 10 years of completion, both of the engineer and the contractor is responsible of the fault, according to the article no. 870 of the Iraqi civil law no. 40 on 1951[6]. The same sanction is available in the Jordan law no. 43 on 1976 article no. 788, 651 in Egypt law no. 131 on 1948 and 1792 in francs law, and article 744 of the Palestine civil law no. 4 of 2012, the sanction may be financial and/or personal prison[8].
5. Algerian law in 1975 applied the sanctions in article 554 towards the responsibility on both contractor and the architectural designer engineers, if the whole building fails or a part of the building fails during first 10 years of completion, both of the engineers and the contractor is responsible of the fault, according to the article no. 554 [9].
6. Britain law applied the sanction at 1939 towards the responsibility on both contractor and the architectural designer engineers, if the whole building fails or a part of the building fails during first 6 years of completion, or after 12 years of completion, both of the engineer and the contractor be responsible of the fault, according to the article no. 554 [10].
7. The author detailed in all the types of sanction due to the fail a part or all the building, but did not mention any sanction against the employer towards their faults [11].
8. A Study conducted in the United States of America, due to setting a high level of sanctions has the impact of triggering a defense by the labors, that causes shifting the mechanism, from managers of the firms that supervising production to the verifying legality of the law, this situation had effect of the production and caused decreasing the productions, therefore the managers modified the labor contracts from the long term to the short terms, daily basis, weekly basis or monthly basis. The side effect of modifying the contracts was to decrease the products [12].
9. Internal Policy for the Engineers Union in Iraq, not applied any sanction on government clients for any unfair action towards the contractors [13].

10. In the case of default delays of contractor payments by the government side more than 28 days, there is no any sanction towards the default client, but law let the contractor to claim and ask for financial compensation of the delayed payment, the payment consider as an official interest which is between 4%-7% in a year [4], [5], [14].
11. Criminal punishment applied in Kuwaiti law, the punishment may be execution, permanent prison, temporary imprisonment, or the sanction may be financial, like penalty or confiscation [15].
12. The Sanction Law no, 111 and all the modifications, were not mentioned applying any sanction towards whom make the routine system more complex or to whom delay the contractor projects works [16].
13. The Iraqi legal system regulation 1929 for disciplining the governmental employees had not specialized any article to punish any client towards obstacle contractors [17].
14. The research explained the sanctions that applied towards the failure of a part or whole the building, but did not mention any sanction towards employer clients who delay the contractor's payments or make the routine system more complex for the contractor [18].
15. The report in very comprehensive and investigated about deficiency in the law, and made a suggestion list to modify the regulation and instructions, but did not mention any suggestion of modify the routine system and not suggested any sanction towards the clients who delay the payment or be an obstacle for the contractor [19].
16. The law of retirement and social insurance for workers or privet sector and all the amendments, specialized articles to reiteration of all employees in the private sector with the director of the companies, but the law not included the owners or who has shears or participants in the companies or the contractors, therefore the contractors considers that it is as a punishment for working in the private sectors [20].
17. Pre advanced payment, if the contractor been paid for a pre advanced payment, could provide the materials on time and pay for the workers and labors on time and success on the work, vies versa could not goes according the plan and finally delayed and face to the sanctions [21].
18. The Law applied the sanction towards the responsibility on both contractor and the architectural designer engineers, if the whole building fails or a part of the building fails during first 10 years of completion, both of the engineers and the contractor is responsible of the fault [22].

3. Objectives:

Explaining the applied sanctions and applying unfair legal sanctions during the implantation of the projects, or during the design of the projects towards the contractors, and suggesting some suitable points to modify the IGCC and the legal instruction in order to decrease or prevent the delay or mistakes in the projects in the stages of forecasting, designing, planning and implementation of the projects and avoiding applying unfair sanctions on the responsible clients.

This study focused on finding the main reasons that causes sanctions that faced to the contractors which leads to delay, stopping the works of projects, bankruptcy of the contractors or losing a huge amount of contractor's money in constructional projects, in other words trying to decrease the limit of the range or avoid making variation orders during the implementations stage which happens resulting from the deficiencies of the design or the contract.

4. Methodology:

This study depended on theoretical and practical data reviews, for collecting of the theoretical data 20-related papers has been reviewed as summarized in Table 3, and for collecting the practical data 30-no. of questionnaire forms had been distributed among various scientific level of engineers that have experience in construction field , residential engineers and the site engineers. Each form was consists of two parts of clients for review as follow:

1. Employer's client related questionnaire forms. 7-related sensitive factors had been selected and distributed through Google form's facility among the academic class of society, the engineers could vote for the impact of the answers from (1 to 5), which means (un available, low importance, neutral, important, very important) in sequence, then analyzed the data's as summarized in the Table 1.
2. Contractor's client related questionnaire forms. 6-related sensitive factors had been selected and distributed through Google form's facility among the academic class of society, the engineers could vote for the impact of the answers from (1 to 5), which means (un available, low importance, neutral, important, very important) in sequence, then analyzed the data's as summarized in the Table 2.

The voted answers were analyzed through an important sensitive statist equation 1, which called the Relative Important Index (RII) equation, then the RII was been found as summarized in the last column of the same Tables 1 and 2.

$$RII = \frac{\sum_{i=1}^5 Wi * Xi}{A * N}$$

1

Where:

RII – Relative Importance Index

W –Weighting given to each factor by the respondents and ranges from 1 to 5

X – Frequency of the response given for each cause

A – Highest weight (i.e. 5 in this case)

N – Total number of respondents.

5. Results and Discussion:

70-questionnaire related forms had been distributed among the engineers' voters.

30-questionnaire forms that were related to vote of 30 engineers were completely returned for each of the employer's client and the contractor's related clients, and the result summarized as follow:

5-1: Employer's Related Factors:

The five most important related factors had been selected according to the RII factors. The results were sorted according to the RII impact factor's as shown in figure 2:

- The impact of routine system's effect in the directorates was 0.87.
- The impact of Designer's Engineer's effect was 0.89
- The impact of lack of trusting in Banks effect was 0.82
- The impact of weakness of laws and regulations effect was 0.75
- The impact of financial sectors effect was 0.63
- The effects of contract monitoring engineers and the resident engineers were poor; the impacts were only 0.59 and 0.55 in sequence.

While the delays occurs in the projects, the employer should investigate about the reasons and find the reasons that have related to the employer faults especially if the fault was include one of the 5-important impact factors that have been mentioned in the Table 1, The employer should take action and make sanctions for the defective client

5-2: Contractor's Related Factors:

The five most important related factors had been selected according to the RII factors. The results were sorted according to the RII factor's impact as shown in figure 3:

- The impact of financial ability effect was 0.86.
- The impact of contractor himself effect was 0.75
- The impact of lack of logistics section effect was 0.72
- The impact of project manager effect was 0.71

- The impact of monitor effect was 0.66
- The effects of monitors and the site engineers poor; the impacts were only 0.66 and 0.64 in sequence.

While the delays occurs in the projects, the Contractor should investigate about the reasons and find the reasons that have related to the Contractor especially if the fault was within one of the 5-important impact factors that have been mentioned in the Table 2. The contractor should take action and make sanctions for the defective client in order to avoid frequent repetition and continuous delays.

5-3: Sanctions Result:

After reviewing 20 numbers of papers, noticed that 16 of papers mentioned the applied sanctions on contractor, designer and the employees which is 70%, and other 6-papers mentioned the power of employer to have ability to make financial and/or personal actions towards the contractors without any sanctions which is 30%, as summarized in Table 4.

The Clients who were already sanctions applied on were 70%, and the other 30% which is the employer client were not applied any sanction of towards their faults as shown in Figure 4.

6. Conclusions:

The study conducted to manage the legal sanctions towards the employer's and contractor's clients that were not performed their duties in an accepted range, and caused deficiencies and faults in the projects. The legal aspects were taken in to consideration in this study; there were two main parties;

1. **Employer Clients:** The impact factors for the employer's clients were very effective, especially the 5-most clients that had RII between (0.87 – 0.63), as shown in Fig. 2
 - The impact of routine system's effect in the directorates was 0.87.
 - The impact of Designer's Engineer's effect was 0.89
 - The impact of lack of trusting in Banks effect was 0.82
 - The impact of weakness of laws and regulations effect was 0.75
 - The impact of financial sectors effect was 0.63

The study focused on managing legal sanctions towards the employers' clients' faults that may not applied a fair or eligible punishment that caused losses of the contractors or leads to bankruptcy due to occurring small mistakes in the implemented works by the contractor. The graphs explained that routine system had the main roll for dealing the projects while there was no any sanction towards the routine system, in addition the government proud of the routine system which caused delays and cost losses by several contractors.

The designer engineers takes the second rank in rolling responsibilities for delaying through occurring a lot of deficiencies and performing unqualified designs, that caused delays or implementing un suitable work, while no any sections applied towards the faults of designers neither in GCCI, FIDIC no in Civil Laws No. 40.[4], [5], [6].

2. **Contractor Clients:** The impact factors for the contractor's clients were effective, especially the 5-clients that had RII between (0.86 – 0.66), as shown in Fig. 3

- The impact of financial ability effect was 0.86.
- The impact of contractor himself effect was 0.75
- The impact of lack of logistics section effect was 0.72
- The impact of project manager effect was 0.71
- The impact of monitor effect was 0.66

This study focused on the contractors faults especially the reasons that shown in the graphs, and noticed that the legal articles sanctions available and they are accurate against any delay or unqualified performed items. Therefore the contractor subjected to the punishment due to his faults. [4], [5], [6]

3. Sanctions Applied:

70% of all the faults related to the contractor and the designer sanctions applied for as shown in Fig. 4

30% of the faults related to the employer were not applied legal sanctions for.

Recommendations:

1. The design section should use local or foreign experts to assist them towards decreasing or avoiding to making variation orders that resulted from designers faults.
2. Modify article no, 62 of the GCCI, involving sanction to be applied on the employer in case causes to delay of contractor's payments, and compensation to the contractor and offers the right to the contractor to temporary stop the works.

The existing sanctions should be reviewed, and the Sanctions suggested to be applied for the employer's faults as summarized in the table 1.

References:

[1] Murali Sambasivan, Yau Wen Soon, Causes and effects of delays in Malaysian construction industry, International Journal of Project Management 25, 517–526, 2007.

- [2] A.A. Aibinu, G.O. Jagboro, The effects of construction delays on project delivery in Nigerian construction industry, International Journal of Project Management 20 , 593–599, 2002.
- [3] د. نجيب خلف أحمد الجبوري, "القانون الإداري", كتاب صادر من جامعة السليمانية, الطبعة الأولى , ص 352-340 , 2015.
- [4] FIDIC, article (8.4 and 8.4) page 31, 2006.
- [5] IGCC, article (7, 8, 22, 25, 27, 40, 41, 48, 54, 89.).
- [6] Iraqi Civil Laws no. 40, Article , modified on 1951.
- [7] د.سوزان عثمان قادر , أطرحة دكتورا مقدمة الى مجلس كلية القانون و السياسة جامعة صلاح الدين – أربيل , ص 229-221 , 2015
- [8] Iraqi Civil Laws no. 40, Article 868, 869, 870, 871, modified on 1951.
- [9] أ: عايذة مصطفىاوي , الضمان العشري و الضمانات الخاصة لمشيدى البناء في التشريع الجزائري والتشريع المقارن , دفاثر السياسة و القانون , 2012.
- [10] خالد حسن عبدعلي , دراسة عن الضمان العشري لعقود مقاولات الإنشاء استنادا للمادة (٨٧٠) من القانون المدني العراقي رقم (٤٠) المعدل , 1951
- [11] د. محمد جابر الدوري, مسؤولية المقاول و المهندس في مقاولات البناء و المنشآت الثابتة بعد أنجاز العمل و تسليمه, 1985.
- [12] Oded, Marcin Jakubek, Employer sanctions, and the welfare of native workers, Economics Letters 117, 533-536, 2012.
- [13] Internal Policy for the Engineers Union in Iraq.
- [14] Iraqi Civil Laws no. 40, Article Iraqi Civil Laws no. 40.
- [15] أ.د.سامي محمد فريج , التخطيط للعقد, ص109 , 2007.
- [16] قانون العقوبات رقم 111 المعدل – الكتاب الثاني – الجرائم المضرة بالمصلحة العامة, لسنة 1969
- [17] النظام القانوني لتأديب الموظف العام في القانون العراقي, 1929
- [18] مروه خالد خنطيل , ضمان المقاول والمهندس في التشريع العراقي الضمان الخاص, بحث مقدم إلى مجلس كلية القانون / جامعة القادسية, 1929
- [19] تقرير لجنة قطاع البناء والتشييد , تحليل الوضع الراهن للقطاع من الجانب الاقتصادي و و الأقتراحات و التوصيات العامة لتطوير قطاع التشييد
- [20] قانون التقاعد والضمان الاجتماعي للعمال المعدل رقم 39 لسنة 1971.
- [21] الشروط العامة للمقاولات و الأعمال الهندسية المادة () .
- [22] عادل عبد العزيز عبد الحميد سماره , مسؤولية المقاول والمهندس عن ضمان متانة البناء في القانون المدني الأردني " دراسة مقارنة , "جامعة النجاح الوطنية ,كلية الدراسات العليا, ص 73-77 , 2007.

Table 1: Delay Management Templates (Responsible Persons), Weight, frequency and impacts due to the Contractor faults.

No.	Employer	Templates	Impacts					RII
			1	2	3	4	5	
1	Routine system	to what extent the contractor should subject to the government complex Routine system without considering size and priority of the project by the government.	1	0	3	6	2	0.89
2	Designer's Engineer	To what extent the Design, Bill of quantities, Drawings and the tender documents are includes deficiencies	0	1	2	1	1	0.87
3	Lack of Trust in Bank	To what extent the banks have the lack of facilitation, not paying the lone to the contractors and they do not payback even the contractors deposits	0	1	7	1	1	0.82
4	Weakness of laws and Regulations	To what extent the week of laws and regulations are not support the legal rights of the contractor	0	2	8	1	5	0.75
5	Financial Sector	To what extent the Employer's financial sector delay the contractor payments even all the related documents are legal without any deficiencies	4	5	7	1	3	0.63
6	Contract Monitoring Manager	To what extent the contract monitoring employer's manager delay, ignore and be an obstacle towards the contractor's requirements even all the requirements are legal.	4	5	1	9	1	0.59
7	Resident Engineers	To what extent the Employer's Resident Engineers to be an obstacle towards progressing of the projects and they do not let the works to go on normally even all the events pursuits according to the lows.	3	4	2	2	0	0.55

Table 2, Literature Review Table

Reference No.	Author	Volume and page	Title of the research	Client	Fault	Sanction	Recommendation
[1]	Murali Sambasivan Yau Wen Soon	25 517– 526 2007	Causes and effects of delays in Malaysian construction industry	Contractor	delay shortening unqualified Failure	withdraw of works, confiscation of insurance	Deducting the penalty according to the Priority of the Projects
[2]	A.A. Aibinu, G.O. Jagboro	20 593– 599, 2002	The effects of construction delays on project delivery in Nigerian construction industry	Contractor	delay shortening unqualified Failure	withdraw of works, confiscation of insurance	Deducting the penalty according to the Priority of the Projects
[3]	د. نجيب خلف أحمد الجبوري	-340 352 2015	القانون الإداري	Contractor & Architectural Designer	Failure within 10 years	Financial Personal	Stay the law as it is
[4]			FIDIC	Contractor & Architectural Designer	Failure within 10 years	Financial Personal	Stay the law as it is
[5]			IGCC	Contractor & Architectural Designer	Failure within 10 years	Financial Personal	Stay the law as it is
[6]		Article 40 1951	Iraqi Civil Laws no. 40	Contractor & Architectural Designer	Failure within 10 years	Financial Personal	Stay the law as it is
[7]	عادل عبد العزیز عبد الحمید سماره		مسؤولية المقاول والمهندس عن ضمان متانة البناء في القانون المدني الأردني	Contractor & Architectural Designer	Failure within 10 years	Financial Personal	Stay the law as it is
[8]		Article 868, 869, 870, 871, modified on 1951	Iraqi Civil Laws no. 40	Contractor & Architectural Designer	Failure within 10 years	Financial Personal	Stay the law as it is

Reference No.	Author	Volume and page	Title of the research	Client	Fault	Sanction	Recommendation
[9]	أ. عايدة مصطفاوي		الضمان العشري و الضمانات الخاصة لمشيدي البناء في التشريع الجزائري	Contractor & Architectural Designer	Failure within 10 years	Financial Personal	Stay the law as it is
[10]	خالد حسن عبدعلي	870 1951	دراسة عن الضمان العشري لعقود مقاولات الإنشاء استنادا للمادة (٨٧٠) من القانون المدني العراقي رقم (٤٠) المعدل ، 1951	Contractor & Architectural Designer	Failure within 6 years or 12 years	Financial Personal	Stay the law as it is
[11]	د. محمد جابر الدوري	1985	مسؤولية المقاول و المهندس في مقاولات البناء و المنشآت الثابتة بعد أنجاز العمل و تسليمه	Contractor & Architectural Designer	Failure within 10 years	Financial Personal	Stay the law as it is
[12]		117 533- 536, 2012	Oded, Marcin Jakubek	Employees	Severe Sanction	Limitation contract from long term to short term contract	Stay the law as it is
[13]			Employer sanctions, and the welfare of native workers	Contractor & Architectural Designer	Failure within 10 years	Financial Personal	Stay the law as it is
[14]		Iraqi Civil Laws no. 40	Iraqi Civil Laws no. 40	Employer	Delaying the payments	No Sanction	Sanction to be applied
[15]	أ.د. سامي محمد فريج	109 2007	التخطيط للعقد	Contractor	Failure within 10 years	Financial Personal (Prison or execution)	Stay the law as it is
[16]		1969	قانون العقوبات رقم 111 المعدل - الكتاب الثاني - الجرائم المضرة بالمصلحة العامة	Employer	make the routine system more complex	No Sanction	avoiding routine system

Reference No.	Author	Volume and page	Title of the research	Client	Fault	Sanction	Recommendation
[17]		1929	النظام القانوني لتأديب الموظف العام في القانون العراقي	Employer	make the routine system more complex been as an obstacle to contractor	No Sanction	Sanction to be applied
[18]	مروه خالد خنطيل	1929	ضمان المقاول والمهندس في التشريع العراقي الضمان الخاص	Employer	make the routine system more complex	No Sanction	Sanction to be applied
[19]			تقرير لجنة قطاع البناء والتشييد ، تحليل الوضع الراهن للقطاع من الجانب الاقتصادي و و الأقتراحات و التوصيات العامة لتطوير قطاع التشييد	Employer	make the routine system more complex	No Sanction	Sanction to be applied
[20]		1979	قانون التقاعد والضمان الاجتماعي للعمال المعدل رقم 39	Employer	make the routine system more complex	No Sanction	Sanction to be applied

Table 3: Summary of Clients made Faults and Availability of Sanctions applied

Total Client made Faults	Detailed Client made faults	Frequency sanctions in Reviews	Availability of Sanction	Frequency of Sanction %	Accumulative Frequency of Sanctions %
Contractor, Designer and Employees	Contractor	3	Applied	15	70
	Contractor and Designer	10	Applied	50	
	Employees	1	Applied	5	
Employer	Employer	6	Not Applied	30	30

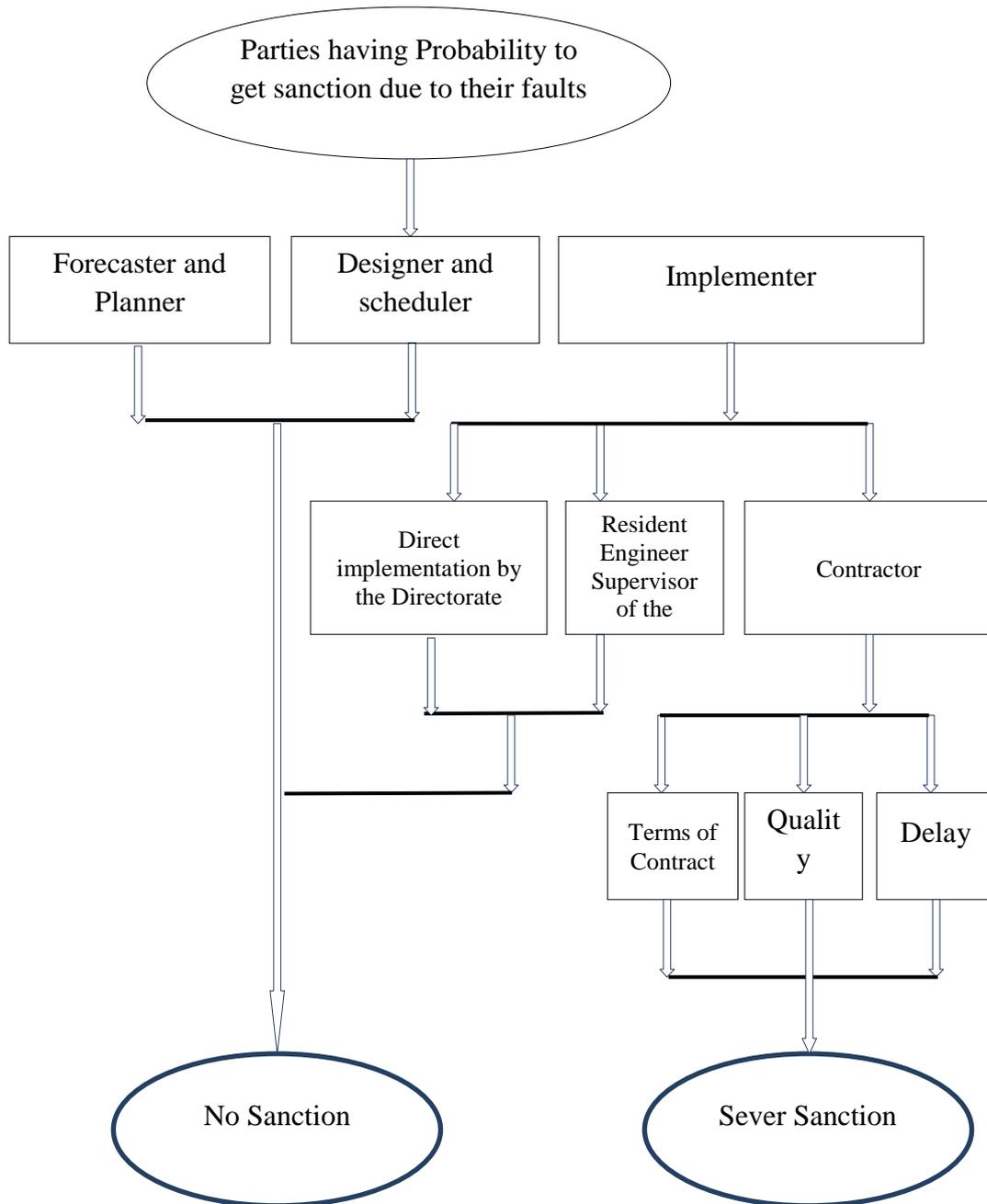


Figure. 1: Clients having probability to get Sanction and actual clients that really gets sanctions due to their faults.

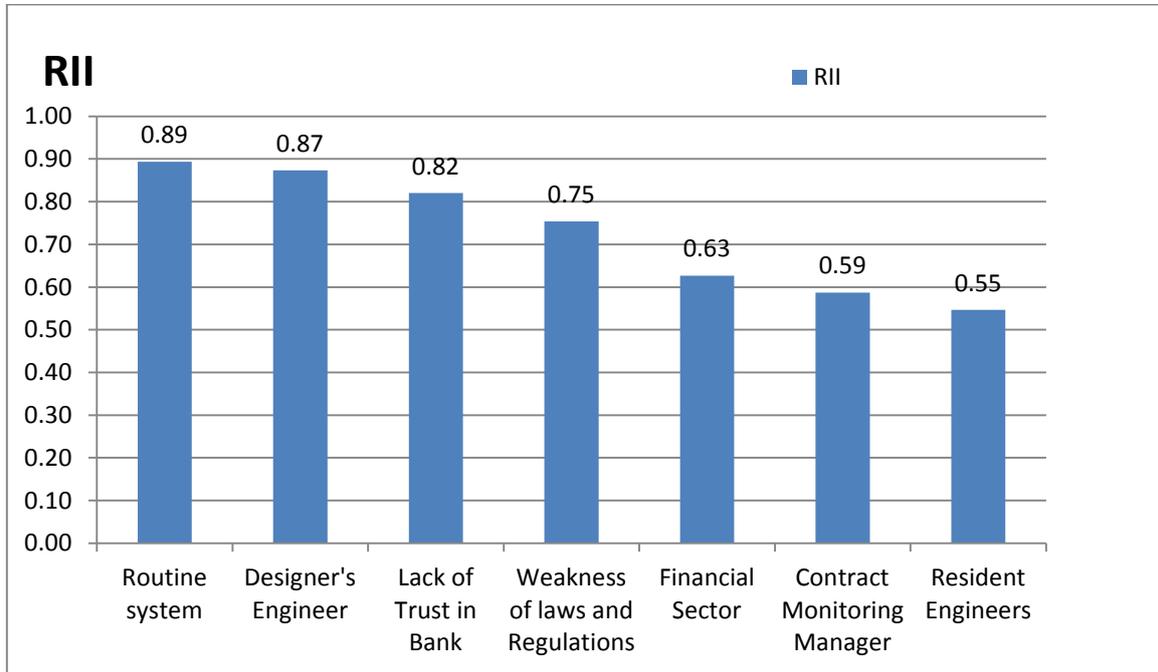


Figure 2, Employer's Parameters Impact

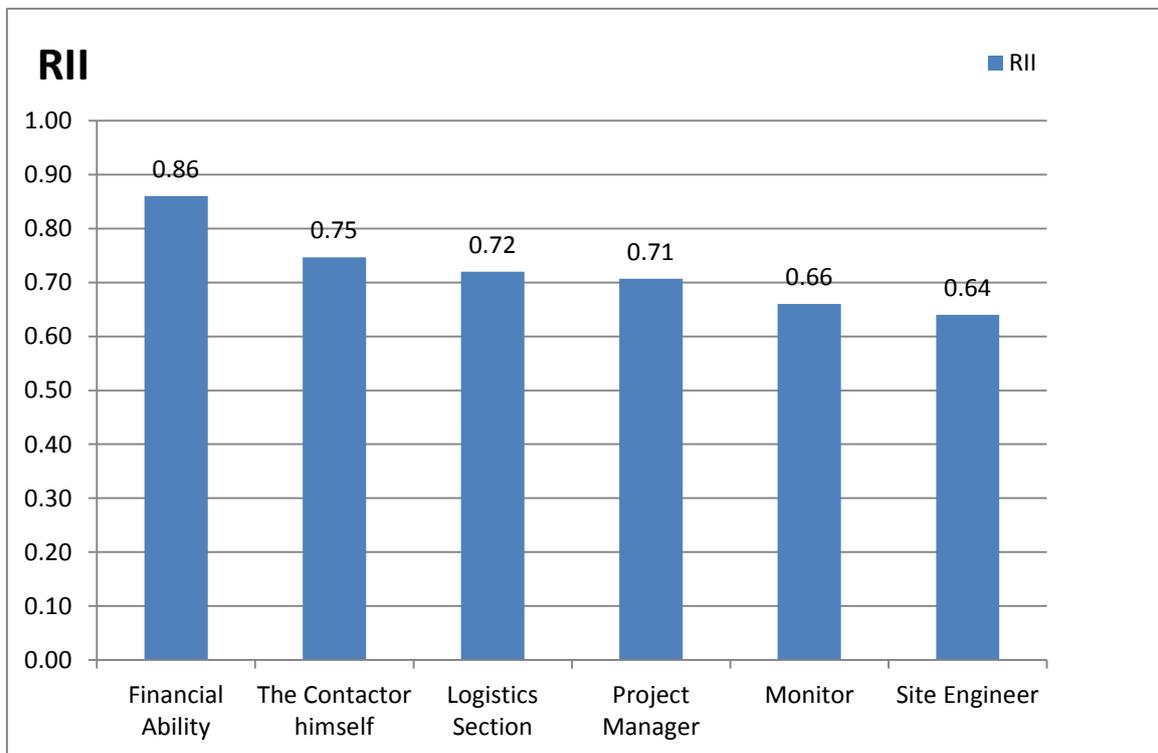


Figure 3, Contractor's Parameters Impact

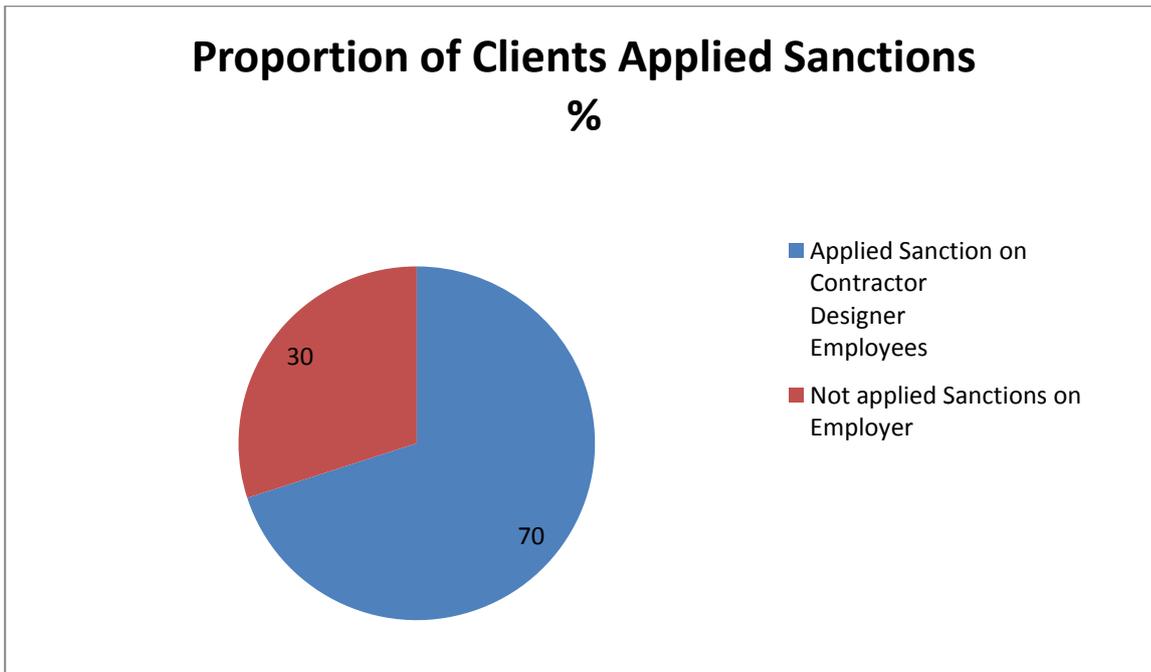


Figure 4, Proportion Clients Applied Sanctions