

## **Subcontractor Default Insurance (SDI): A Comparative Analysis with Surety Bonds – the Contractor’s Perspective**

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### **Abstract**

Surety bonds have a long history in North American and International construction and many of the current principals of suretyship emanate from Roman law dating back to 150 AD. In 1996, an alternative product for subcontractor bonding was introduced into the United States market – Subcontractor Default Insurance (SDI). Zurich Insurance Company developed the original SDI product (SubGuard<sup>®</sup>) and remains the only insurer offering this type of coverage. SubGuard<sup>®</sup> is a two-party agreement between the contractor and the insurer that provides the contractor catastrophic insurance coverage for the cost of subcontractor and supplier default. Unlike surety bonds, SDI is not first dollar coverage, but rather subject to co-pay and policy deductibles. Contractors with SDI programs submit that SDI is a more cost effective approach, with enhanced coverage limits, that gives the contractor greater control in managing subcontractor default. However, SDI requires the contractor to accept additional financial risk, have the capability to prequalify subcontractors enrolled in the program, and accept sole responsibility for the management of subcontractor default. Zurich has indicated that they will soon roll out a SDI program in Europe. This paper evaluates the advantages and disadvantages of SDI and provides a comparative analysis with surety bonding.

### **Key Words:**

Subcontractor default insurance, surety bonds, SubGuard<sup>®</sup>

### **1. Introduction**

The annual value of construction in the United States of America (U.S.) is in excess of one trillion USD (US Census Bureau). For decades, contractor and subcontractor surety bonds have been utilized on a significant portion of the non-residential portion of new construction in the U.S. to transfer performance and payment risk to a surety. A surety bond is a three party agreement whereby the surety guarantees to one party, the owner or the contractor, the performance (or payment) of another party, the contractor or subcontractor respectively. In the U.S., surety bonds are typically required on federal, state and local government work and are quite common on larger non-residential projects in the private sector (McIntyre & Strischek, 2005).

In 1996 an alternative risk management product for subcontractor performance was launched - Subcontractor Default Insurance (SDI). SDI is a catastrophic insurance policy that provides coverage to the general contractor for the cost of subcontractor and supplier default. Over the past decade more than 130 large commercial contractors have adopted subcontractor default insurance on some or all of their work (Zurich 2008). Although SDI has been in the US market for over a decade, there is limited empirical

data evaluating, a) its advantages and disadvantages, or 2) a comparative analysis of SDI with traditional surety bonds. This study addresses both of these issues.

## **2. Surety Bonds**

A surety is a person or legal entity that agrees to be responsible for the debt or obligation of another party. The first known suretyship contract dates back to etchings on a Mesopotamian clay tablet originating around 2750 BC. The foundation for many of the current principals of suretyship emanate from Roman law dating back to 150 AD (McIntyre & Strischek 2005).

Sureties are typically a subsidiary of a large insurance company, but the operational fundamentals of surety underwriting differ widely from the carrier's primary insurance business. With surety bonds, the underwriter has no expectation of loss. Sureties view contractor failure or default as avoidable (McIntyre & Strischek 2005). As a result, the underwriting process more closely resembles that used with the credit and lending industry. Surety's make a decision to extend surety 'credit' on the behalf of a contractor or subcontractor based upon the firm's ability to meet the obligations of the underlying contract (Bruner & O'Connor 2008).

Surety bonds are typically issued in tandem as payment and performance bonds. A performance bond provides assurance that the contractor/subcontractor will perform the work in accordance with the contract documents. It is generally written for 100% of the contract price. A payment bond guarantees payment. A subcontractor bond provides payment protection for sub-subcontractors, suppliers, labor and the other payment obligations incurred by the subcontractor necessary for the execution of the work. Similar to a performance bond, the face value is typically for 100% of the contract price (Nelson 2007).

Surety bonds serve two primary purposes – prequalification and risk transfer. Surety prequalification efforts provide independent, third party assurance that the subcontractor (or contractor) can deliver the project in accordance with the terms and conditions of the contract documents and meet its financial obligations. In addition to prequalifying project participants, surety bonds provide protection in the event that the subcontractor/contractor is unable or unwilling to perform. This transfer of performance and financial risk to the surety is the primary reason federal and state governments require contractor performance and payment bonds (Hansen 2004).

Advocates of surety bonds submit the primary advantages of subcontractor (and contractor) performance and payment bonds include: a) independent, third party prequalification, b) performance and payment protection, c) first dollar coverage with no deductible, and d) 100% coverage of the contract value (Nelson 2007). Criticism voiced regarding surety bonds generally focuses around two primary concerns: a) the length of time for surety response to a default, and b) the narrow perspective of the surety's response to subcontractor default (Gray 2002).

## **3. Subcontractor Default Insurance (SDI)**

Subcontractor Default Insurance (SubGuard<sup>®</sup>) is a two-party agreement between the contractor and the insurance company (Zurich) that provides catastrophic loss protection for subcontractor (and supplier) default. Zurich Insurance Company developed the original SDI product (SubGuard<sup>®</sup>) and remains the only writer of subcontractor default insurance (Higgins 2007).

SubGuard<sup>®</sup> provides coverage for both the direct and indirect costs incurred to remedy a subcontractor default. Qualifying direct costs include those that are incurred in fulfilling the defaulting subcontractor's contractual obligations regarding performance or payment, correction of non-conforming work, and the

cost of attorneys and consultant fees incurred to remedy the default or in the defense of any dispute with the defaulted subcontractor. Indirect costs covered by the policy include delay damages, acceleration cost, and extended overhead. For coverage to be initiated the subcontractor must be formally declared in default, but need not be terminated (Nelson 2007).

Policy limits, deductibles, and co-pays vary based upon the risk profile acceptable to both the contractor and the insurer. Negotiations every three years between Zurich and the contractor establish the framework and premium structure for the contractor's program and a policy establishing coverage is executed on an annual basis. Each annual policy establishes the expected subcontractor enrollment volume and associated premium as well as the policy's deductible, co-pay, aggregate retention, single occurrence, and aggregate limits (Nelson 2007, Zurich 2007).

SubGuard<sup>®</sup> is not first dollar coverage but rather a type of self-insurance providing coverage for catastrophic loss. The contractor is responsible for all costs up to the policy deductible. The deductible is negotiable, but normally ranges from 350k to 2 million per occurrence (subcontractor default). Once the deductible is reached the co-pay layer applies for each occurrence. The co-pay layer typically ranges from 1 million to greater than 5 million. Costs falling within the co-pay layer are shared by the contractor and the carrier. Normally the contractor's portion is 20% of this layer (Nelson 2007). For example, a contractor with a \$500,000 deductible and a 20% co-pay on the next \$1,000,000 would be liable for up to \$700,000 for a single occurrence if costs resulting from the subcontractor default reached \$1,500,000. The SubGuard<sup>®</sup> program is structured to ensure that the contractor has 'skin in the game' – a vested interest in minimizing loss.

Once the deductible and co-pay are satisfied (for each occurrence), the underwriter is liable for any additional costs up to the single occurrence policy limit which can extend up to a maximum of \$50 million per occurrence. Aggregate retention and aggregate limits are applicable should there be multiple defaults within a policy year. Withstanding the policy limits, the aggregate retention is the maximum dollar risk retained by the contractor for a policy year in the event of multiple defaults. It is normally 3-5 times the deductible. The aggregate limit is the maximum exposure for the carrier (Zurich) and can extend up to \$150 million (Zurich 2007).

Because of the added financial risk and program requirements the targeted market for SubGuard<sup>®</sup> are large commercial and industrial contractors that have an annual subcontract value of greater than 75 million. These are contractors listed in *Engineering News Record's* Top 400 Contractors (Zurich 2007). Contractors suitable for the program are those who understand, accept, and are able to manage the additional responsibility associated with a catastrophic loss insurance program. The program is only suitable for firms that have the institutional knowledge and experience to effectively evaluate and prequalify subcontractors as well as the willingness and ability to accept the financial risk inherent with insurance coverage limited to catastrophic loss (Tretthewey 2008). It is only appropriate for contracting firms that are seeking greater control over the response to a default and those firms that also have the financial strength to absorb the deductible and co-pay liability should default occur (Gray 2002).

Since the first SubGuard<sup>®</sup> policy issued in 1996 the program has seen significant growth and penetration of its targeted market. By January 2007 enrollment in the program included 17 of the top 30 ENR contractors, 45 of the top 100, and 100 of the top 400 ENR contractors (Zurich 2007). As of early 2008, the program has grown to one hundred thirty-six (136) U.S. and Canadian contractors with a combined subcontractor and supplier enrolled value in excess of 35 billion (Zurich 2008).

For both the insurer and the contractor, the pricing structure for a SubGuard<sup>®</sup> program assumes the inevitability of subcontractor default (McIntyre 2007). Contractor pricing of subcontractor default insurance (SDI) involves three primary components: a) a risk transfer premium paid to the insurer, b) the

cost to manage subcontractor/supplier prequalification and claims, and c) a loss sensitive premium to build up a reserve fund for anticipated future claims (Higgins 2007).

#### **4. Research Objective and Methodology**

SDI is a recently developed concept, and SubGuard<sup>®</sup> is a risk management product with little more than a decade of history. As a result, very little data evaluating its use and application is available. Therefore, the primary purpose of this study was to investigate surety bonds and SDI in order to: a) identify the advantages and disadvantages of both, and b) develop a comparative analysis of the two products. To address these two objectives, general contractors, surety bond producers, surety companies, subcontractors and owners were solicited to complete a self-administered survey. The contractor population was comprised of those firms listed in Engineering News Record's 2008 listing of The Top 400 Contractors (Tulacz 2008) in the U.S. with greater than 50% of their annual volume in general building. Due to the size of the study population and paper length limitations of CICV-V only the contractor findings are presented in this paper.

The online questionnaire contained seventy-three (73) questions on surety bonds and subcontractor default insurance. By the cutoff date, fifty-five (55) contractors with SubGuard<sup>®</sup> experience responded. Of the respondents, (50) U.S. contractors currently have a SubGuard<sup>®</sup> program. Since there are approximately 120 U.S. contractors with a SubGuard<sup>®</sup> program (Zurich, 2007), this represents a 42% response rate.

#### **5. Findings**

The findings presented in this paper are based solely upon input from general contractors with subcontractor default insurance (SubGuard<sup>®</sup>) experience and should be viewed from that perspective. The data presented in this paper is based upon the contractors' perspective of surety bonds and their SubGuard<sup>®</sup> program. As a result it may vary or conflict with the input from the owners, bond producers, sureties, and/or subcontractors.

General Contractors with a SubGuard<sup>®</sup> program enrolled an average of 55% of their subcontract volume in the program. The average enrollment volume was 286 million, and collectively the 50 contractors have an enrollment of approximately 15 billion of subcontract value. Twenty percent (20%) of the firms have been using SubGuard<sup>®</sup> for 1-2 years, fifty-one percent (51%) for 2-5 years, and twenty-nine percent (29%) have had a SubGuard<sup>®</sup> program for over 5 years. Eighty-seven percent (87%) of the firms indicated that their volume of subcontractor enrollment was stable or increasing. Enrollment was trending down in seven percent of the firms and five percent (5%) no longer participated in the SubGuard<sup>®</sup> program.

The questionnaire focused on three categories: 1) the advantages and disadvantages of subcontractor surety bonds, 2) the advantages and disadvantages of subcontractor default insurance, and 3) a comparative analysis of the two. A 5-point Lickert scale was utilized for response and unless noted otherwise the typical response options were: 1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, and 5=strongly agree. All responses were statistically tested using a confidence level of 95.0% and the statistically significant findings are tabulated on Tables 1, 2, and 3. It should be noted that there was a statistically significant variance from the mean on 60 (82%) of the 73 questions.

## 5.1 Subcontractor Surety Bonds

The contractors' views regarding the advantages and disadvantages of subcontractor surety bonds are shown in Table 1. Contractors view the surety prequalification process as an advantage and typically require subcontractors to be able to furnish a bond (be bondable), even if one is not required. However, contractors do not view sureties as being more capable than contractors to prequalify subcontractors nor in a better position to assess subcontractor capability and capacity.

Contractors view payment protection for suppliers & 2<sup>nd</sup> tier subcontractors as an advantage, but they do not think that payment and performance bonds are a good value. Their claim service and response to subcontractor default is seen as a disadvantage. In the event of subcontractor default, contractors view surety response as untimely and not responsive to the needs and concerns of the contractor. They think the surety's remedy typically does not minimize project delay nor total project cost.

**Table 1: Subcontractor Surety Bonds**

Question / Topic	Mean	Finding
Sureties can better assess subcontractor capability & capacity.	2.61	Disagree
Typically contractors must be bondable, even if not required to furnish a bond.	3.87	Agree
Typically subcontractors must be bondable, even if not required to furnish a bond.	3.84	Agree
In the event of subcontractor default the surety:		
generally responds in a timely fashion.	1.64	Disagree
is typically responsive and executes a remedy that minimizes project delay.	1.55	Disagree
generally executes a remedy that minimizes total project cost.	1.78	Disagree
remedy typically addresses the needs and concerns of the general contractor.	1.69	Disagree
Sureties are much more capable than contractors to prequalify subcontractors.	2.33	Disagree
Subcontractor performance and payment bonds are a good value.	2.53	Disagree
Response scale ranges from 1=significant disadvantage to 5= significant advantage		
Cost (Value) of a bond	2.67	Disadvantage
Surety responsibility for the remedy of a default	2.44	Disadvantage
Surety response time to a default	1.66	Disadvantage
3 <sup>rd</sup> party (surety) prequalification of contractor/sub	3.37	Advantage
Surety claim service	2.04	Disadvantage
Payment protection for suppliers & 2 <sup>nd</sup> tier subs	3.33	Advantage

## 5.2 Subcontractor Default Insurance (SubGuard)

Table 2 presents the findings regarding subcontractor default insurance (SubGuard<sup>®</sup>). Contractors believe that a SDI program helps them be better managers of subcontractor risk and more proactively address poor subcontractor performance. The lack of case law or the large deductible does not discourage its use. The use of SDI does not dampen a contractor's efforts to resolve subcontractor disputes nor does it give the contractor a false sense of security or increase the likelihood of unwarranted subcontractor default.

A SDI program improves the contractor's subcontractor prequalification process. Contractors do not view the prequalification process as burdensome or invasive on the subcontractor. Contracting firms submit that they have a policy to protect the privacy of the sub's financial information to insure that it is not misused or misinterpreted. Contractors believe that SDI is an advantage for a subcontractor because it does not tap their bonding capacity. They submit that SDI does not create a disincentive for subcontractor enrollment, but rather encourages the use of small and minority subs that cannot obtain bonding.

Contractors currently using SubGuard<sup>®</sup> are satisfied with the program. Dissatisfaction with surety response to sub default was important in their decision to use SubGuard<sup>®</sup>. Possible cost saving is a

significant incentive for its use. Other factors important for their decision to use SubGuard® include, a) possible cost savings, b) contractor control in managing sub default, c) expanded coverage limits, and d) the first party relationship they have with the carrier.

**Table 2: Subcontractor Default Insurance (SubGuard®)**

Question / Topic	Mean	Finding
<b>Risk Management</b>		
SDI helps contractors to become better managers of subcontractor risk.	4.16	Agree
The large deductible is a significant deterrent to the use of SDI.	2.53	Disagree
Use of SDI increases the likelihood of unwarranted subcontractor default.	2.03	Disagree
The lack of case law (legal precedence) for SDI discourages its use.	2.49	Disagree
Contractors using SDI more proactively manage poor subcontractor performance.	4.20	Agree
Markup of SDI direct costs poses a False Claims Act liability on federal work.	2.66	Disagree
<b>Dispute Resolution</b>		
Use of SDI increases the likelihood of unwarranted subcontractor default.	2.03	Disagree
SDI dampens the contractor's efforts to resolve subcontractor disputes.	1.85	Disagree
The ease of sub default declaration can give the GC a false sense of security.	2.45	Disagree
With SDI, a defaulted subcontractor has little leverage or recourse except litigation.	2.45	Disagree
<b>Prequalification Process</b>		
A SDI program improves the contractor's subcontractor prequalification process.	4.49	Agree
The prequalification process requires the subcontractor to share sensitive information:		
that the contractor may misinterpret or misuse.	2.38	Disagree
that may adversely impact the sub's competitive position.	2.01	Disagree
The subcontractor prequalification process is invasive.	2.45	Disagree
A prequalification process for each contractor's SDI program is a burden on the sub.	2.39	Disagree
Contractors have a policy to protect the privacy of the sub's financial information.	4.39	Agree
<b>Enrollment</b>		
SDI is an advantage for a sub because it does not tap the sub's bonding capacity.	3.81	Agree
Most subs would rather supply a bond than be enrolled in a SDI program.	2.35	Disagree
SDI creates a disincentive to use subs not already in the SDI program for that year.	2.13	Disagree
<i>Bondability</i> is typically a prerequisite for a sub to be enrolled in a SDI program.	3.44	Agree
SDI encourages the use of small and minority subs that cannot obtain bonding.	3.58	Agree
<b>Cost</b>		
We are satisfied with the SDI program.	4.34	Agree
Possible cost savings is a significant contractor incentive influencing SDI's use.	3.71	Agree
Project owners are made aware of the pricing structure of a SDI program.	3.26	Agree
<b>Importance of the following in the GC's decision to use SubGuard®</b>		
Response scale ranges from 1=Very Unimportant to 5= Very Important		
Possible cost savings with SubGuard®.	3.40	Important
Contractor control in managing subcontractor default.	4.47	Important
Expanded subcontractor coverage limits with SubGuard®.	4.08	Important
First party relationship with the insurer.	4.25	Important
Dissatisfaction with surety response to subcontractor default.	4.08	Important

### 5.3 A Comparative Analysis of SDI and Surety Bonds

Statistical results for the survey questions providing a comparative analysis of SDI and surety bonds are tabulated in Table 3. In the event of subcontractor default SDI gives the contractor greater control and flexibility to manage the default. It improves a contractor's ability to complete the project on time and within budget.

Contractors submit that a SubGuard® program provides higher coverage limits, better coverage for larger subcontractors, and longer duration of coverage after project completion. Contracting firms submit that SDI requires them to have a more intensive sub prequalification process. They submit the program provides better payment protection for the project owner, reduces the owner’s financial risk, and the cost is lower than subcontractor bonds. In addition, they purport that the program broadens the pool of subcontractors and suppliers for the project

**Table 3: A Comparative Analysis of SDI and Surety Bonds**

Question / Topic	Mean	Finding
<b>In the event of subcontractor default:</b>		
SDI gives the contractor greater control and flexibility to manage sub default.	4.51	Agree
SDI improves a contractor’s ability to complete a project on time.	4.19	Agree
SDI improves a contractor’s ability to complete a project within budget.	4.02	Agree
SDI provides the contractor less leverage over a subcontractor that has defaulted.	2.40	Disagree
<b>Coverage</b>		
Bonds provide better coverage for subcontractor risk on larger projects.	2.35	Disagree
Coverage duration after project completion is typically longer with SDI.	4.01	Agree
SDI provides increased coverage limits for a defaulted subcontractor.	4.03	Agree
Bonds provide better sub and supplier payment protection for the owner.	2.39	Disagree
A project owner’s financial risk is increased with SDI.	1.81	Disagree
Project owners prefer subcontractor bonds.	2.62	Disagree
<b>Cost/Pricing</b>		
SDI is generally priced to the project owner at, or slightly less, than surety bonds.	3.64	Agree
Subcontractor bonds typically cost the project owner more than SDI.	3.45	Agree
<b>Prequalification &amp; Subcontractor Participation</b>		
SDI requires a contractor to have a more intensive sub prequalification process.	4.24	Agree
Subcontractors that cannot get a bond are often enrolled in SubGuard®.	2.35	Disagree
Bonds ensure better quality subcontractors & suppliers for the project.	2.19	Disagree
Bonding subcontractors will increase sub/supplier competition for the project.	2.15	Disagree
SDI broadens the pool of subcontractors and suppliers for the project.	3.43	Agree

## 6. Conclusion

Within the span of approximately a decade, subcontractor default insurance (SubGuard®) has been adopted by one hundred thirty-six (136) large U.S. and Canadian contractors. During that time, subcontractor and supplier enrollment has grown to greater than 35 billion. The participating SDI contractors have largely replaced, or eliminated, the use of subcontractor surety bonds.

This transition is rooted in contractor dissatisfaction with subcontractor surety bonds, in particular surety claim service. Surety response to subcontractor default is viewed as untimely and failing to address the needs and concerns of the general contractor. The surety’s remedy typically does not minimize project delay or overall cost. Contracting firms value the surety’s prequalification process but believe they are in a position to do an equal, or better, job of assessing subcontractor capability and capacity. Overall, contractors do not consider bonds a good value.

Conversely, contractors using SDI are satisfied with the program. Ninety-five percent (95%) of the contractors in this study have retained their SubGuard® program and the subcontractor enrollment of ninety-two percent (92%) of these firms is increasing or stable. Contractors believe that their SDI program encourages them to improve their subcontractor prequalification process and become better managers of subcontractor risk. The program affords them greater control and flexibility in managing

subcontractor default to minimize its adverse effects on the project. The large deductible is not a deterrent and possible cost savings resulting from effective loss control is an incentive. Expanded coverage duration and claim limits with SubGuard® are also considered an important attribute of the program. Contracting firms submit that SDI expands subcontractor participation in the project. They don't view their prequalification process as burdensome or invasive and claim to have policies to protect the privacy of subcontractor financial information to ensure that it is not misinterpreted or misused.

Subcontractor default insurance (SubGuard®) has been adopted by a number of large contracting firms in the U.S. as an alternative risk management tool to subcontractor surety bonds. It may also prove to be an appealing alternative to surety bonds and/or letters of credit that are popular in European construction markets.

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