PERFORMANCE GUARANTEES AND CLAIMS
– evidence from ICC and GCD

1 SUMMARY
ICC members active in trade finance have collected large scale data on the claim and drawing rates of Performance Guarantees (i.e. Bid, Advance Payment, Performance and Retention) and financial guarantees, showing very low drawing and pay out rates, due to the nature of these products which only pay out when there are failures in the underlying contract/agreement.

GCD members have collected similar data on the drawing rates of performance bonds and guarantees after the obligor has gone into default. This data shows higher but similar drawing rates, reflecting that even after a company defaults, most commercial guarantees do not need to be claimed as either the underlying contractual obligations have been carried out to the satisfaction of both parties to the commercial contract or the business ceases and both parties have come to a mutual agreement without a claim under the guarantee being enforced.

These data together support an average Credit Conversion Factor (CCF) of less than 10% which in turn supports the maintenance of a 20% downturn EAD when calculating Risk Weighted Assets for capital purposes.

2 BACKGROUND
The Basel Committee’s position on performance guarantees has been that “The CCF expresses the likelihood of an off-balance sheet position to become on-balance sheet, i.e. it is not related to the riskiness of a counterparty which is expressed by the position’s probability of default.”

In 2011, the Basel Committee considered some early data from the ICC and suggested that at that time the ICC Trade Register did not provide “sufficient analytical evidence for reducing the CCF in the risk-based approach below 20%”. This paper aims to provide such evidence.

3 PERFORMANCE GUARANTEE PRODUCTS EXPLAINED
Market Practice is market convention to issue guarantees subject to the provisions of the ‘International Chamber of Commerce (ICC) rules Uniform Rules for Demand Guarantees (URDG) 2010, revision, ICC publication 758’. These rules having been endorsed by international organisations, multilateral financial institutions, bank regulators, lawmakers, and professional federations. We broadly categorise these types of guarantees.

Bid Bond / Tender Bond is an undertaking issued on behalf of the applicant that typically supports the applicants bid on a project for a government entity or public / private partnership. The bid often requires a specific form of Guarantee for a bid to be accepted and so amendments may be very difficult to negotiate.

Advance Payment Guarantee / Bond is an undertaking issued on behalf of the applicant to cover receipt of an advance payment for a commercial or trade-related contract and can be claimed if the applicant does not meet its obligations under the terms of the contract.

Performance Guarantee / Bond is a Guarantee which guarantees a performance-based obligation to deliver some equipment or services on an agreed date. That is, an obligation that
is wholly non-financial in nature (or in which the primary obligation is non-financial in nature. An example would be where the client of a bank has contracted with another party to perform a service and asks its bank to provide a Guarantee which can be called by the other party upon failure of performance.

Retention Guarantee / Bond is a Guarantee which is closely linked to performance-based obligations on equipment or services during the warranty period. That is, an obligation that is wholly non-financial in nature (or in which the primary obligation is non-financial in nature).

Financial Guarantee / Bond is an undertaking issued on behalf of the applicant that supports a financial obligation of the applicant where no goods are services are exchanged.

Lease or Rent Guarantee / Bond is an undertaking issued to secure the obligations of a renter or lessee under a lease of property.

Payment Guarantee / Bond is a Guarantee which guarantees a payment-based obligation. That is, an obligation that is wholly financial in nature (or in which the primary obligation is financial in nature), such as the payment of a money sum.

The first four of these guarantees are performance related, while the last three, characterised as Financial Bonds, can be regarded as a credit substitute alongside loan guarantees and standby letters of credit to support loan facilities. Performance Guarantees are a special class of contingent liabilities which share the following characteristics:

- Not expected to be drawn (unlike L/Cs)
- Drawing is dependent on a commercial event (e.g. a contract breach)
- Not issued in support of loans and other financial obligations

3.1 Parties involved:

- Issuing Bank: promises to pay on first demand and receives an indemnity from their customer.
- Beneficiary/recipient: receives the guarantee and may claim or not. They may do this through their own bank.
- Obligor/customer: requests issuance of the guarantee and promises to reimburse the Issuing Bank if the Issuing Bank repays the Beneficiary under a valid claim presented by the beneficiary.

3.2 Performance Guarantees in a default context

Performance guarantees may be claimed by the Beneficiary regardless of whether the Obligor is in default with their bank or not.

No Default: Claim triggered and paid from customers funds with obligor/customer not in default as per Banks internal definition of default, which is also consistent with the regulatory definition of default. Though the customer has sufficient funds, because the claim has been triggered and found to be valid, it has to be paid (i.e. Technical default) however, it does not necessarily translate into a loss.

Default: Claim triggered and paid from customer funds with obligor/customer in default as per Banks internal definition of default. As obligor is classified as defaulted customer and as a claim has been triggered the transaction counts as a defaulted transaction, however if customer has sufficient funds no loss may be triggered. Note, there is a strong likelihood that the transaction will incur a loss as the obligor is in default, but the loss may be registered under the overdraft account.
4 DRAWING RATE, CCF AND LGD

4.1 The post default process
The steps process of determining the final outcome of a borrower default is shown as the following:

![Diagram of the post default process]

- **Default**
- **Quick**
- **Closure**

**Workout Process:**
- Limit overdraft accounts
- Demand repayment by
- Liquidate collaterals
- Deal with claims on

*Guarantees issued need to be dealt with by the bank after default. Each guarantee will be:
- claimed, or
- never claimed (lapse), or
- extended (sometimes multiple times), or
- paid

Until guarantees are dealt with the bank cannot calculate its exposure to the customer

4.2 CCF and LGD data required
The most relevant pieces of information for banks trying to model CCF and LGD for defaulted loans are as follows:

- **Pre-Default**
- **Default**
- **Workout**
- **Closure**

- Limit
- Outstandings

- Outstandings

- Repayments

- Write off
- Loss amount

For cash facilities (loans, overdrafts, etc.) this picture provides the information needed to calculate the needed parameters as follows:
- Credit Conversion Factor (CCF) is the factor needed to forecast outstanding at default using limits and outstanding prior to default
• Loss Given Default (LGD) is the percentage of the final loss amount (write off) divided by the outstanding at default

For contingent facilities (letters of credit (L/C) performance bonds (GTE), etc.) the limit and drawing situation is more complex. For Guarantees it is as follows:

4.3 Drawing Rate and example

For guarantee facilities, therefore, it is necessary to introduce a concept beyond the simple CCF. This concept is the drawing rate of issued guarantee instruments. For example:

A variety of different calculations of CCF and LGD can be made from this hypothetical case:

CCF: 8%, being €2m claimed divided by €25m issued amount. With this method the drawn or called cash exposure is divided by the undrawn potential or issued cash exposure.

LGD: 50%, being €1m loss divided by the aggregate amounts of cash outstanding (at the time of default or during workout), being €2m as above. Note that this excludes discounting of cash flows.
The LGD and CCF are consistent as they both use a basis that the borrower owed the bank €2m. With this LGD method the amount drawn after default is added to the exposure at default.

As the data analysis sections show below, the CCF calculated is a reasonable level for contingent trade products after default.

5 ICC Data on drawing rates overall

ICC organised a special collection of data covering most recent years from 12 of its largest member banks. This resulted in a large number of observations of performance guarantees issued, claimed, paid or extended. To be clear, the transaction types covered were the same as the GCD facility types below, covering both financial and performance guarantees.

<table>
<thead>
<tr>
<th>Type of Gtee and year</th>
<th>Number of gtees issued</th>
<th>Number of gtees claimed or extended</th>
<th>Claim Rate</th>
<th>Number of gtees paid out</th>
<th>Claims Paid Rate</th>
<th>Number of gtees extended (not paid)</th>
<th>Ultimate drawing rate. Number of gtees paid out vs number issued</th>
<th>Count of lender ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>105,740</td>
<td>6,198</td>
<td>6%</td>
<td>1,486</td>
<td>24%</td>
<td>4,101</td>
<td>1.41%</td>
<td>7</td>
</tr>
<tr>
<td>2017</td>
<td>34,544</td>
<td>1,779</td>
<td>5%</td>
<td>455</td>
<td>26%</td>
<td>1,442</td>
<td>1.58%</td>
<td>7</td>
</tr>
<tr>
<td>2018</td>
<td>34,573</td>
<td>2,417</td>
<td>7%</td>
<td>452</td>
<td>19%</td>
<td>1,443</td>
<td>1.32%</td>
<td>7</td>
</tr>
<tr>
<td>Performance</td>
<td>1,254,667</td>
<td>23,145</td>
<td>2%</td>
<td>3,197</td>
<td>14%</td>
<td>18,475</td>
<td>0.25%</td>
<td>12</td>
</tr>
<tr>
<td>2016</td>
<td>409,731</td>
<td>7,378</td>
<td>2%</td>
<td>846</td>
<td>11%</td>
<td>6,066</td>
<td>0.21%</td>
<td>12</td>
</tr>
<tr>
<td>2017</td>
<td>423,463</td>
<td>7,449</td>
<td>2%</td>
<td>1,009</td>
<td>14%</td>
<td>5,904</td>
<td>0.24%</td>
<td>12</td>
</tr>
<tr>
<td>2018</td>
<td>421,473</td>
<td>8,318</td>
<td>2%</td>
<td>1,342</td>
<td>16%</td>
<td>6,505</td>
<td>0.32%</td>
<td>12</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1,360,407</td>
<td>29,343</td>
<td>2%</td>
<td>4,683</td>
<td>16%</td>
<td>22,576</td>
<td>0.34%</td>
<td>12</td>
</tr>
</tbody>
</table>

The largest data amount is for performance guarantees, as all 12 banks supplied this data, whereas only 7 banks supplied data on financial guarantees. The data is set out from left to right in accordance with the process: guarantees issued, guarantees claimed or extended, guarantees actually paid. The claim rate is inflated with the same guarantee potentially being claimed several times due to the nature of a claim. A claim is usually made by way of a “pay or extend” notice sent by the beneficiary to the issuing bank. This is done in order to put commercial pressure on the customer to settle the financial or commercial matter which is the subject of the guarantee. Issuing banks often extend several times, with an end result of usually not needing to pay.

For financial guarantees the claim rate averages 6% over the 3 years, however only a quarter of those claims are usually paid, bringing the final “ultimate drawing rate” down to 1.41%. Bearing in mind that this data covers both defaulted and non-defaulted borrowers, this data is consistent with a default rate of around 1%, if only defaulted borrowers caused successful claims.

For true performance guarantees the situation is very different, with only 1/3 of the level of claims, at 2%, with only 14% of these being paid out. This leaves an “ultimate drawing rate” of only 0.25% of issued performance guarantees being paid. This is higher than the default frequency observed in the ICC Trade Register Report of 2018, consistent with the scenario that not all guarantees paid are connected to defaulted borrowers and not all defaulted borrowers with guarantees issued have them called and paid.

1 ICC Trade Register Report 2018 https://iccwbo.org/publication/icc-trade-register-report/
6 GCD Data analysed

6.1 Drawing Rates for common trade related facility types

GCD data only covers cases where the borrower has defaulted (using the Basel definition). Drawing rates (or rather their inverse) is shown in the GCD data by the “percentage of facilities never drawn in cash”, see last column below:

<table>
<thead>
<tr>
<th>Trade Finance Type</th>
<th>Risk Type</th>
<th>Facility Type</th>
<th>Number of Defaulted Facilities</th>
<th>Defaulted amounts (€)</th>
<th>Average outstanding at default (€)</th>
<th>Average Issued Amounts (€)</th>
<th>% of facilities never drawn as cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium Term Trade Finance</td>
<td>Cash</td>
<td>ECA Export Finance</td>
<td>407</td>
<td>4,689,812,239</td>
<td>9,436,242</td>
<td>2,01%</td>
<td></td>
</tr>
<tr>
<td>Short Term Trade Finance</td>
<td>mixed</td>
<td>Bill accepted by Bank</td>
<td>57</td>
<td>252,014,111</td>
<td>4,421,300</td>
<td>8,77%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>Letter of Credit Export Finance</td>
<td>155</td>
<td>841,926,891</td>
<td>5,431,786</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>mixed</td>
<td>Transactional Trade Finance</td>
<td>379</td>
<td>1,346,596,179</td>
<td>3,553,024</td>
<td>12,40%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contingent</td>
<td>Confirmed Export L/C sight or usance</td>
<td>106</td>
<td>46,428,585</td>
<td>438,006</td>
<td>88,88%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Import L/C sight or usance</td>
<td>815</td>
<td>174,402,013</td>
<td>231,990</td>
<td>88,59%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cash</td>
<td>730</td>
<td>23,329,000</td>
<td>1,166,400</td>
<td>83,00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade Related Payment Guarantee</td>
<td>212</td>
<td>23,955,357</td>
<td>112,997</td>
<td>81,60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply Chain Finance</td>
<td>Cash</td>
<td>Prepayment Finance</td>
<td>8</td>
<td>10,095,217</td>
<td>1,261,902</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Receivables Financing</td>
<td>436</td>
<td>6,043,282,529</td>
<td>1,758,813</td>
<td>0,09%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Structured Inventory Finance</td>
<td>50</td>
<td>291,066,644</td>
<td>4,933,313</td>
<td>3,39%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contingent</td>
<td>Contract Bonds</td>
<td>1,745</td>
<td>2,123,658,174</td>
<td>1,216,996</td>
<td>88,42%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Payment Guarantee and Stand By L/C</td>
<td>6,298</td>
<td>1,031,368,246</td>
<td>163,761</td>
<td>92,60%</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td>13,787</td>
<td>16,897,935,186</td>
<td>1,225,643</td>
<td>61,28%</td>
<td></td>
</tr>
</tbody>
</table>

Cash lines are normally drawn to some degree (in around 90% of cases) and therefore the “never drawn” rate is low, less than 10%. For contingent lines, including both performance guarantees and credit substitutes, the “never drawn” rate is very high. For all contingent facility types over 80% of facilities never experienced a cash drawing after default. Some few of the cash facilities had no drawings either, but this represents normally 0% to 3% of cases. The mixed facility transactional trade finance, which includes both L/C and cash lines shows a mixed outcome, with 12% of facilities never drawn, probably representing the L/C dominated lines.

6.2 Drawing rates for performance guarantees

Now we focus in on the actual drawdown rate for only performance guarantees. The three facility types which GCD classes as performance guarantees are 811 (Trade Related Payment Guarantee), 820 (Contract Bonds) and 807 (Trade Finance Bid or Perf Bond). We examine these in more detail in the table below:

<table>
<thead>
<tr>
<th>Trade Finance Type</th>
<th>Risk Type</th>
<th>Facility Type</th>
<th>Number of Defaulted Facilities</th>
<th>Aggregated Defaulted amounts (€)</th>
<th>Average outstanding at default (€)</th>
<th>Average Issued Amounts (€)</th>
<th>Average drawdown rate of Issued Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Term Trade Finance</td>
<td>Contingent</td>
<td>Bill or Performance Bond</td>
<td>15</td>
<td>14,152,000</td>
<td>943,467</td>
<td>182,786,911</td>
<td>12,185,027</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trade Related Payment Guarantee</td>
<td>196</td>
<td>25,584,363</td>
<td>521,984</td>
<td>129,547,711</td>
<td>711,918</td>
</tr>
<tr>
<td>Supply Chain Finance</td>
<td>Contingent</td>
<td>Contract Bonds</td>
<td>1,648</td>
<td>147,943,397</td>
<td>69,773</td>
<td>853,041,504</td>
<td>517,622</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td>1,859</td>
<td>185,632,381</td>
<td>169,950</td>
<td>1,179,370,186</td>
<td>632,264</td>
</tr>
</tbody>
</table>

The facilities examined here are only those where the Lender has provided the Issued Amount for the guarantee facility, so comprises about 90% of the data used in the previous table. However, the presence of the Issued Amount allows us to calculate a more accurate drawdown rate where we take into account the amount of the drawings, not just the binary drawn/not drawn marker used above. Overall the drawing rate is around 8%, which industry experts advise is an expected level, based on the low claims proportion as well as the ability of banks to extend the guarantee instead of paying, until the commercial position is resolved, in most cases. The resulting LGD of these cases is around 32% (before discounting) which is a little above the normal unsecured LGD level seen in other GCD studies, however not high enough to offset the extreme low drawing rates and hence low CCF rates in the data.
6.3 LGD for Trade Finance Facilities

Based on the discussion of the special nature of contingent facilities in the previous section, we need to be careful when establishing exactly what method and what data to use for calculation of the historical LGD. Note that the LGD calculations are made using GCD standards with discount of cash flows at the risk free rate, see method notes to the 2019 Large Corporate LGD paper.

Firstly, to be clear, we are using the calculation method called by GCD as “LGD2” where the starting default outstanding amount is increased by any drawings which happen after default. This method is more appropriate for contingent facilities which often have 0 cash outstanding at date of default as all risk is in issued instruments which may or may not be drawn at a later date. The alternative method “LGD1”, which nets all post default cashflows, often results in incalculable LGD because the divisor of outstanding at default is zero.

Secondly, we have chosen to cap the maximum LGD at 150% and floor it at 0%. There do exist real cases above and below these points, normally smaller size cases, due to legitimate reasons such as workout costs higher than recoveries or payment by the borrower of penalty fees and interest above the discount rate.

Thirdly, we need to factor into our averages what we do with the cases where there is no drawing of the contingent instruments. One method is to exclude these cases as they have the same problem of incalculable LGD due to the divisor of outstanding at default being zero. A second method would be to include these cases as observations of 0% LGD.

The LGD2 results for most of the cash type facilities are well below the 20% average we have seen in our Large Corporate studies. Receivables financing at around 21% is very similar to normal corporate financing, as might be expected, as the recovery of receivables is integral to most liquidation scenarios. The high level of LGD2 for Transactional Trade Finance is unexpected at 38%, however this is a mixed group of both cash and contingent lines, so only the drawn contingents are driving up the LGD here.

The results for contingent and mixed cash and contingent facility types differ starkly dependent on whether the never drawn cases are included or not. For example, when examining only the 7.4% of Payment Guarantees and Standby L/Cs which ever become drawn, then the outcome is a very high 46.8% LGD, however when including the full 100% of these cases the LGD drops to around 3%.

For contingent facilities this supports the arguments and data from the ICC Trade Register study. If the substantial number of undrawn cases are used to support a very low CCF rate, then a normal to high level of LGD results for the remaining cases. If these undrawn cases are included in the LGD calculation then exceptionally low LGD is observed. Clearly it would be methodologically unsound to use these undrawn cases to calculate both a low CCF and a low LGD at the same time.
7 Conclusion

ICC data shows drawing rates for performance guarantees of less than 1%, for the total population of defaulted and non-defaulted borrowers.

GCD data shows a higher drawing rate of 8% on the same facility types but only for defaulted borrowers. Clearly this indicates that there is some connection between the borrower's default and the claim and drawing of commercial guarantees issued on their behalf.

Both data sets support the case that a CCF of 20% is acceptably conservative.