

The

2022GCTM

AGENT BANKS
IN EMERGING
MARKETS
SURVEY

BACK TO WHAT WE'RE USED TO

After a period of 'grade inflation' followed by market stress and geopolitical turmoil, the results of this year's ABEM survey resemble the status quo ante.

Back in what we might call “the old days”, before the world began regularly throwing curve balls at the markets, the majority of categories for most providers in the Agent Bank surveys were rated as good, if not spectacular. This pattern now seems to be re-establishing itself, while the markets at the top of the order have largely retained their relative positions. It will be interesting to see whether those high scoring markets

retain their position when tested by prolonged volume pressure and ever shortening settlement cycles.

Completion of the ABEM survey has traditionally involved cooperation among colleagues at respondent institutions, particularly in the network management team. Given its breadth and scope, the exercise usually involves canvassing the views of those with responsibility for particular geographies and/or

functions.

We are grateful to those industry participants, both clients and service providers, who worked to ensure that responses were completed. More than 400 validated individual responses received represent several hundred billion dollars in invested assets.

At the back of the ABEM market write-ups, readers will find a reprinted page from the latest ABMM survey covering the Nordics. In recent years, we have noticed that respondents are increasingly choosing to rate their global intermediaries for individual markets where they do not themselves provide an on-the-ground sub-custody service. Our current policy is to include such scores in the market average, reflecting as they do, client perceptions of the levels of service available in the market. However, only agent banks with a physical operation in a market have traditionally been eligible for an individual assessment.

Lines are blurring however, facilitated by new connectivity options and regional offerings. In 2023 we will review our current methodology and would welcome any feedback that either providers or respondents would like to offer. Although, it is often tiresome to have to fill in a survey after every commercial or professional encounter online, this is advanced warning that one may be coming down the line in the new year!

Methodology

The Global Custodian Agent Bank Surveys are designed to elicit the views of cross-border investors about the post-trade services they receive in markets around the world. They have been conducted annually since 1989. The universe of markets in the GC Agent Banks in Emerging Markets (ABEM) survey draws primarily on the MSCI and S&P Emerging Markets lists. Not all of these markets are, however, represented in the accompanying tables. Such representation depends on the number of responses received for each with some discretion at the lower end depending on weightings.

The response pool is drawn from two sources. Those respondents who completed the survey last year are invited to do so again, while service providers in the markets concerned

are invited either to submit client lists for invitation or to approach those clients themselves. In addition, participating service providers are given controlled access to a back-end system to allow them to validate that the ratings they have received come from bona fide clients. Any responses submitted by institutions that were not clients of the rated provider in the 12 months under review are removed.

The questionnaire is divided into 13 service categories. There is only one rating question per category. Participants are asked to rate the quality of service in each category on an online 'scorecard' by using a sliding scale from Unacceptable to Excellent. All other questions are optional and designed to allow the respondent to add supportive comment to their ratings.

Brazil

One of the larger emerging markets in the ABEM survey by volume of activity, scores for the Brazilian market as a whole are below the global average, though 37% of individual category ratings for Brazilian providers equate to either Very Good or Excellent and 34% equate to Good.

Relationship Management, Client Service and Account Management come close to the global average and are also the highest scoring categories for Brazil, comfortably in the Good territory (5.00-5.99).

Responses were received for BNP Paribas, Citi and CACEIS, of which the former passed the threshold for individual presentation of its performance.

BNP Paribas

Over the past 12 months, BNP Paribas has settled an average of 77,906 transactions a month for clients of its Brazilian services. It claims a 5.9% share of the market for inbound institutional custody. The bank points to “an experienced local team with a strong track record in the custody business and an 8+ year average seniority in the securities services industry”. The whole team is based in Sao Paulo.

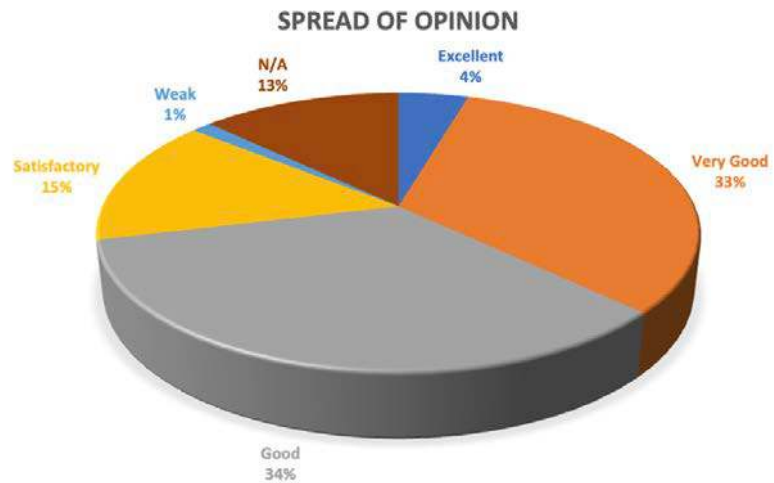
“In Brazil, we have a dedicated team monitoring the market and leading the efforts to work closely with major committees (for example, FEBRABAN and AN-BIMA),” says the bank. Among the issues on which it is currently working are the simplification of both FX procedures and client registration with the regulators.

“We are very pleased with the client service we received,” says one large client. “Given the unique nature of our balances, we sometimes have unusual service requests/data needs. Our inquiries are always well-received, and the team works to ensure an adequate response/solution is determined.”

Other

Although data for Citi and CACEIS are sparse, a client of the former notes, “We are happy with the service received and do not expect to change custodian,” while scores for the latter suggest a high level of client satisfaction.

Brazil	BNP Paribas	Market Score	Global Average
Account Management	5.54	5.47	5.98
Asset Safety and Risk Management	5.27	5.06	5.80
Asset Servicing	5.17	5.22	5.85
Cash Management and FX	5.23	5.21	5.78
Client Service	5.69	5.63	6.02
Data Services	4.73	4.85	5.65
Service Innovation	5.00	4.83	5.54
Liquidity Management	5.20	5.00	5.72
Pricing	4.83	4.89	5.42
Regulation and Compliance	5.00	4.83	5.70
Securities Lending	5.14	5.14	5.77
Relationship Management	5.77	5.74	6.03
Technology	5.31	5.05	5.58
Average	5.22	5.15	5.76



China

China	BNP Paribas	DBS Bank	Standard Chartered	Market Score	Global Average
Account Management	6.43	6.00	6.71	6.46	5.98
Asset Safety and Risk Management	6.10	6.50	6.18	6.19	5.80
Asset Servicing	6.71	6.29	6.25	6.33	5.85
Cash Management and FX	6.10	5.40	6.24	6.00	5.78
Client Service	6.60	6.29	6.82	6.54	6.02
Data Services	5.90	6.20	5.79	5.79	5.65
Service Innovation	5.57	5.80	6.04	5.74	5.54
Liquidity Management	6.60	6.20	6.00	6.14	5.72
Pricing	5.80	6.40	5.92	5.62	5.42
Regulation and Compliance	6.10	6.33	6.21	6.19	5.70
Securities Lending	6.20	5.60	5.81	5.85	5.77
Relationship Management	6.60	6.33	6.79	6.36	6.03
Technology	6.10	6.00	5.80	5.87	5.58
Average	6.22	6.10	6.20	6.08	5.76

Among numerous sub-custodians operating in the Chinese market, Standard Chartered, DBS and BNP Paribas all received sufficient responses for individual listings. Responses were also received for HSBC, ICBC and China Construction Bank. Overall, this is a high scoring market above the global average in all areas.

Standard Chartered

In addition to its role as a sub-custodian in China, Standard Chartered was the first foreign bank to be granted a domestic fund custody licence by the China Securities Regulatory Commission.

“The provider is proactive in providing solutions and very good engagement in managing issues end to end,” says one client. Another, based in the region, praises their account manager, but suggests that technology problems are slow to be addressed.

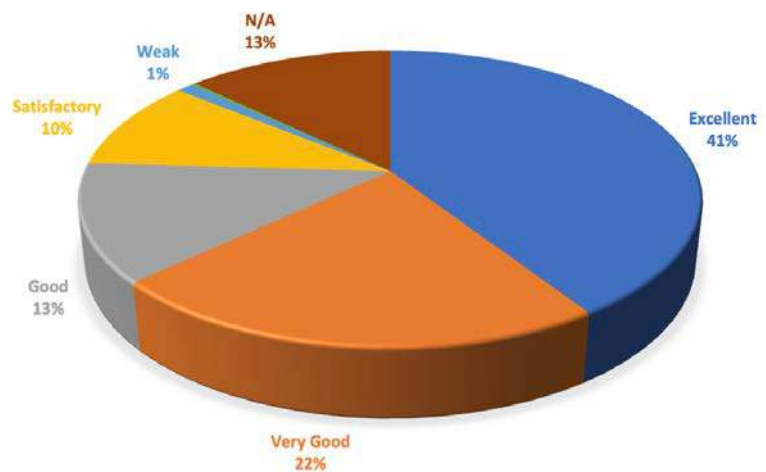
BNP Paribas

BNP Paribas is well regarded for its services in China. The bank’s highest score is for Asset Servicing, well above both market and global averages, followed by Relationship Management and Client Service.

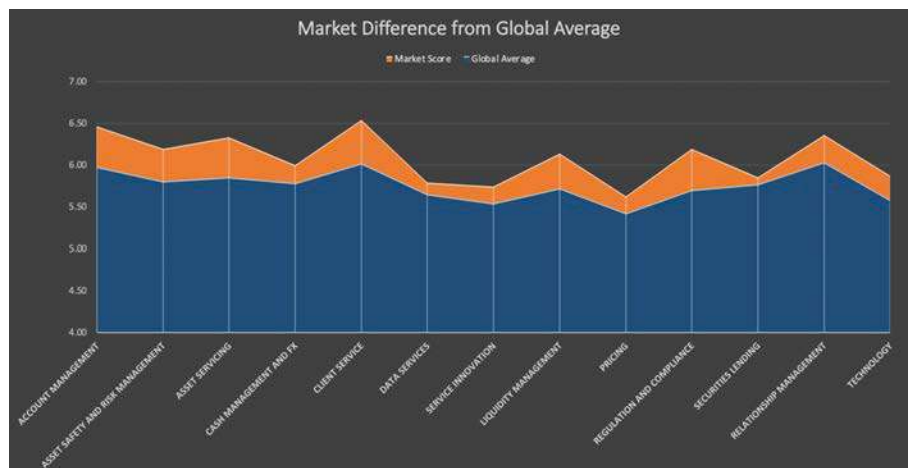
DBS Bank

DBS has also recorded an average score in Very Good Range (6.00-6.99). Relationship Management is rated Excellent by 57% of respondents.

SPREAD OF OPINION



Market Difference from Global Average



Colombia

In November 2021, the Colombian, Chilean and Peruvian stock exchanges approved the creation of a regional holding company with the Chilean and Colombian exchanges controlling 40% each and Peru's the remaining 20%.

The plan is to create an integrated trading and settlement platform in the region. The trading platform is planned for Q4, 2023. Meanwhile the Colombian CSD is to change its core IT system to a solution developed by Montran, based on ISO 20022 XML messaging. It is targeting Q1 2024 as a go-live date.

In other developments, under a resolution of the Tax authority, non-resident investors that are legal entities will be obliged to disclose beneficial owner information when investing in Government bonds, while under a bill before Congress, withholding tax on dividends will increase from 10% to 15-20% (still to be defined).

With responses for BNP Paribas, Citi and HSBC, the Colombian market category scores tack relatively close to the global average. Some 52% of individual respondent ratings at a category level are at Very Good level (6.00) and 29% Good (5.00).

BNP Paribas

In the last 12 months BNP Paribas has processed an average 2,240 transactions a month for clients in the Colombian market. The bank estimates its market share of inbound foreign clients at 10-15%, along with local mutual funds 25% and 60% of local pension funds.

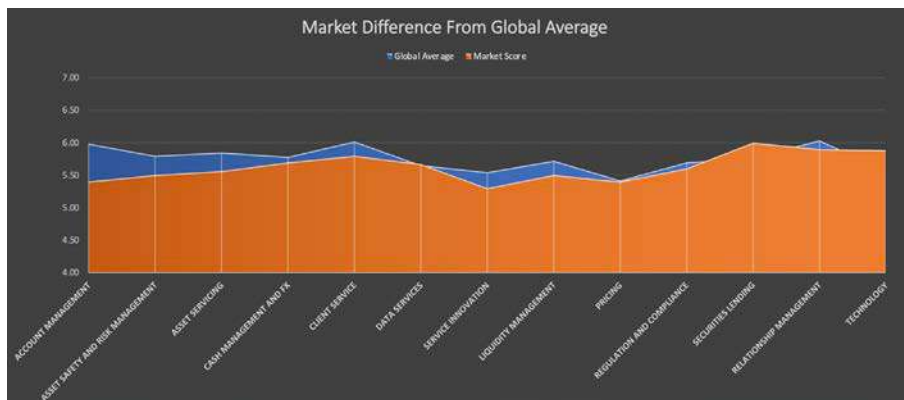
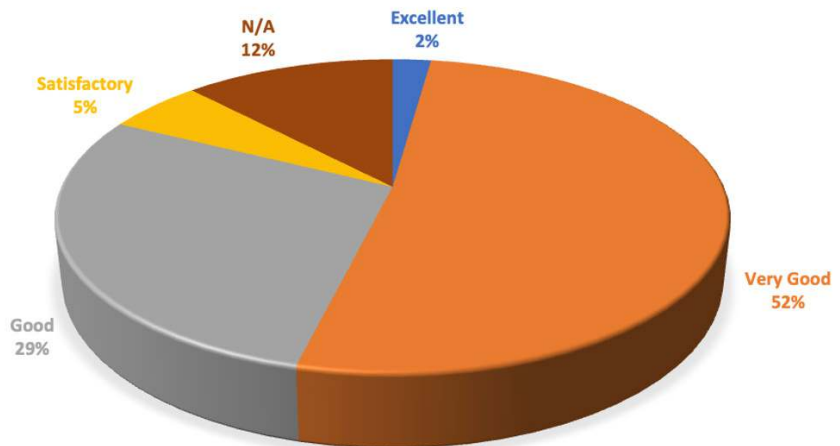
It exceeds the market average in all categories with the exception of Client Service and Relationship Management, which are nevertheless comfortably in Good territory (5.00-5.99). However, one client complains that "Response times are long".

Citi

Although the bank does not receive sufficient ratings for a write-up, its respondents include at least one large global custodian. It appears to be very well regarded for Client Service and Relationship Management and somewhat less for the pricing of its services.

Colombia	BNP Paribas	Market Score	Global Average
Account Management	5.50	5.40	5.98
Asset Safety and Risk Management	5.63	5.50	5.80
Asset Servicing	5.71	5.56	5.85
Cash Management and FX	5.88	5.70	5.78
Client Service	5.63	5.80	6.02
Data Services	6.00	5.67	5.65
Service Innovation	5.38	5.30	5.54
Liquidity Management	5.67	5.50	5.72
Pricing	5.63	5.40	5.42
Regulation and Compliance	5.75	5.60	5.70
Securities Lending	6.00	6.00	5.77
Relationship Management	5.75	5.90	6.03
Technology	6.00	5.88	5.58
Average	5.73	5.63	5.76

SPREAD OF OPINION



Egypt

Egypt	National Bank of Egypt	QNB Alahli	Market Score	Global Average
Account Management	6.00	6.27	5.96	5.98
Asset Safety and Risk Management	6.09	6.18	5.96	5.80
Asset Servicing	5.55	6.18	5.81	5.85
Cash Management and FX	5.69	6.00	5.75	5.78
Client Service	5.92	6.45	5.96	6.02
Data Services	4.60	5.91	5.20	5.65
Service Innovation	4.43	6.00	5.15	5.54
Liquidity Management	5.00	6.11	5.55	5.72
Pricing	4.88	5.55	5.18	5.42
Regulation and Compliance	5.82	5.82	5.69	5.70
Securities Lending	4.50	6.14	5.42	5.77
Relationship Management	6.00	6.27	5.93	6.03
Technology	4.86	6.11	5.45	5.58
Average	5.33	6.08	5.62	5.76

As a whole, the market appears to be regarded as well-served with 53% of individual category ratings either Excellent or Very Good. For the bulk of services, results tack close to the global average.

National Bank of Egypt

Half of respondents for this bank rate the service they receive overall as Outstanding. The bank’s average category scores are, however, spread relatively widely.

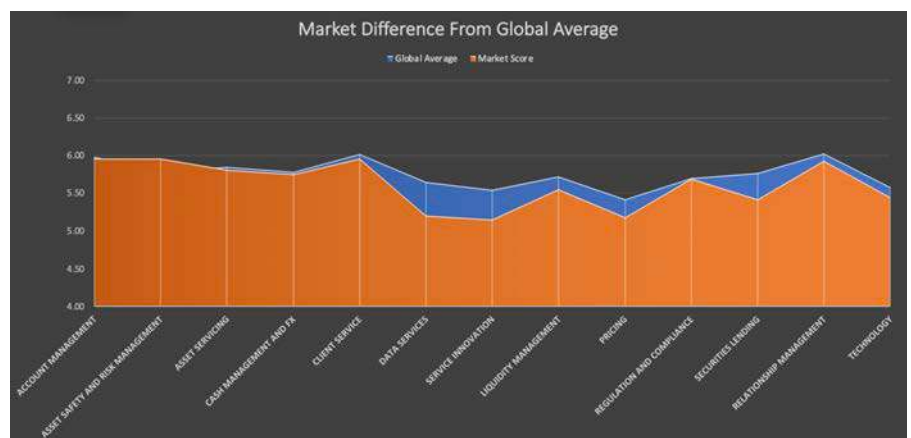
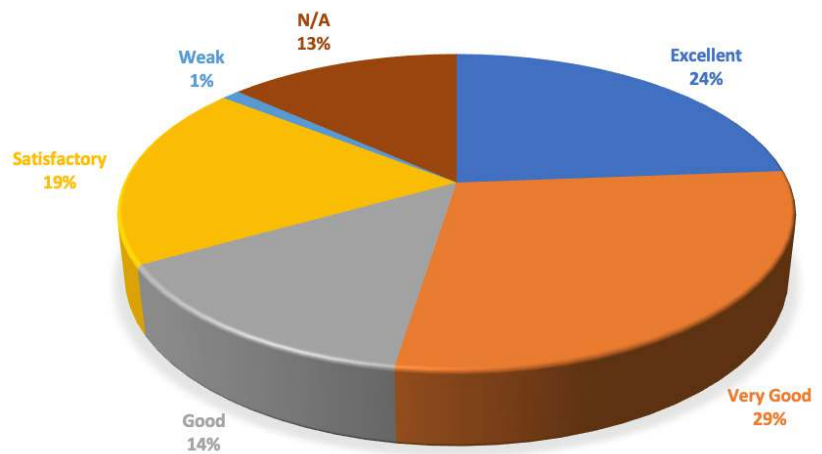
Although Pricing falls into Satisfactory territory, one EMEA client singles this out for praise, observing that, “We still find our pricing in Egypt competitive, and the competitiveness is a requirement for certain structured trades where margins are relatively tight.”

QNB Alahli

QNB claims a 12% share of the Egyptian sub-custody market. It has attracted a mixture of global and regional clients to the survey this year, 70% of whom rate the overall service received as outstanding.

Ten categories are rated in Very Good range and three in the Good range. “Our relationship managers are familiar with our requirements and will bend over backwards to assist,” says one MENA client. “Services are exceeding expectations,” says another North Africa-based client.

SPREAD OF OPINION



Greece

Greece	BNP Paribas	Eurobank	Piraeus Bank	Market Score	Global Average
Account Management	5.73	6.37	6.60	6.31	5.98
Asset Safety and Risk Management	5.55	6.19	6.22	6.04	5.80
Asset Servicing	5.64	6.15	6.45	6.15	5.85
Cash Management and FX	5.38	6.11	6.35	6.07	5.78
Client Service	6.09	6.42	6.65	6.43	6.02
Data Services	5.55	6.25	6.12	6.00	5.65
Service Innovation	5.20	6.00	5.82	5.73	5.54
Liquidity Management	5.43	6.00	6.20	5.97	5.72
Pricing	5.09	6.00	6.35	5.90	5.42
Regulation and Compliance	5.60	6.35	6.24	6.11	5.70
Securities Lending	5.17	5.80	5.92	5.70	5.77
Relationship Management	6.09	6.83	6.84	6.65	6.03
Technology	5.18	5.93	5.80	5.68	5.58
Average	5.52	6.18	6.27	6.06	5.76

The Greek market remains highly competitive when it comes to post-trade services and results are well above the global average in all categories. Sixty-one percent of individual category ratings are either Very Good or Excellent.

BNP Paribas

BNP Paribas processes approximately 31,500 transactions per month in Greece.

With the exception of Relationship Management and Client Service (both 6.09), all the bank’s category scores are in the Good range (5.00-5.99).

Eurobank

Eurobank has turned in a very solid set of scores, averaging 6.18, exceeding the market average in most categories and the global average in all.

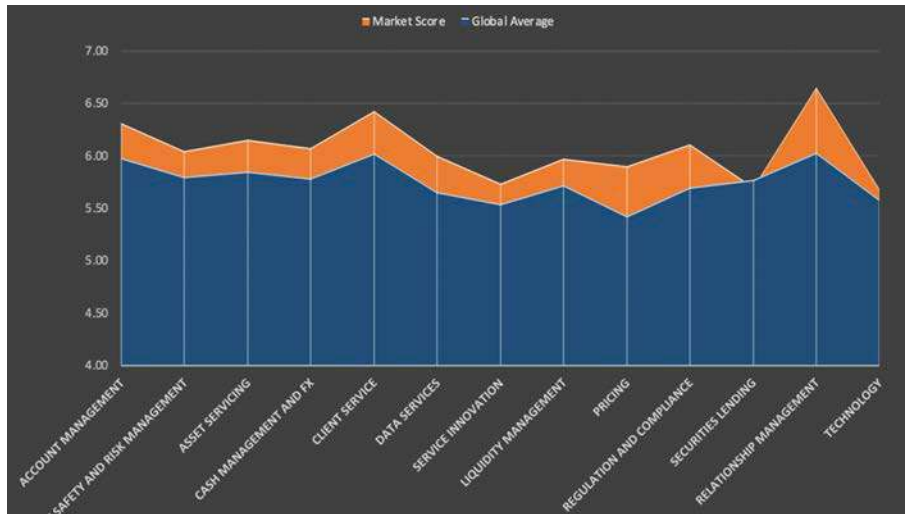
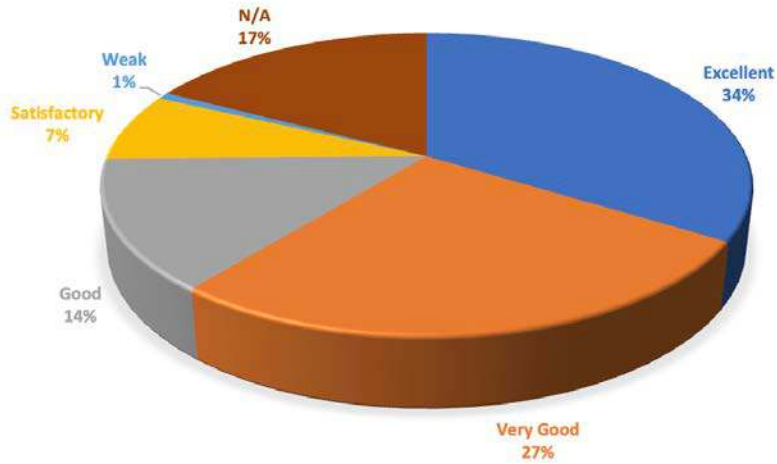
“Short time taken to open a new account and ability to customise reporting to client needs,” says one happy client.

Piraeus Bank

Piraeus Bank has recorded a return to its traditional form with an average score of 6.27, compared to last year’s 5.58.

Several respondents compliment the same Piraeus staff by name. “Excellent relationship with our account manager Mrs Katsam-piri and her team, the heads of institutional Nikos Diakogiannis and Anna Fakiola. Very open minded and business pro, helping their clients at every stage,” is a typical comment.

SPREAD OF OPINION



Hungary

Like many European markets, Hungary has been grappling with the implementation of CSDR and its Settlement Discipline Regime component. Rather than implementing a new system as originally envisaged, KELER - the Hungarian CSD - chose to develop its existing systems, with the involvement of new suppliers.

The main objective of the project, which went live in December 2021, was to achieve T2S harmonisation and to implement a modernised IT architecture to comply with regulatory requirements.

With the entering into force of the Settlement Discipline Regime in February 2022, KELER applied penalties accruing for the first three months (Feb, March, April) in June. Since then, the penalties are applied by KELER as per the standard CSDR rules.

Responses were received this year for BNP Paribas, Raiffeisen Bank International (RBI) and UniCredit, with the first of these qualifying for a write up. The market as a whole is close to the global average across most categories with the exception of pricing, where it is seen as relatively expensive.

BNP Paribas

BNP Paribas estimates its market share for OTC settlements in Hungary at 18% and at 10-12% for assets under custody among foreign investors on the local market. The bank's scores are well up on 2021 when several service categories recorded results as merely Satisfactory range. This year, all categories are rated Good or Very Good.

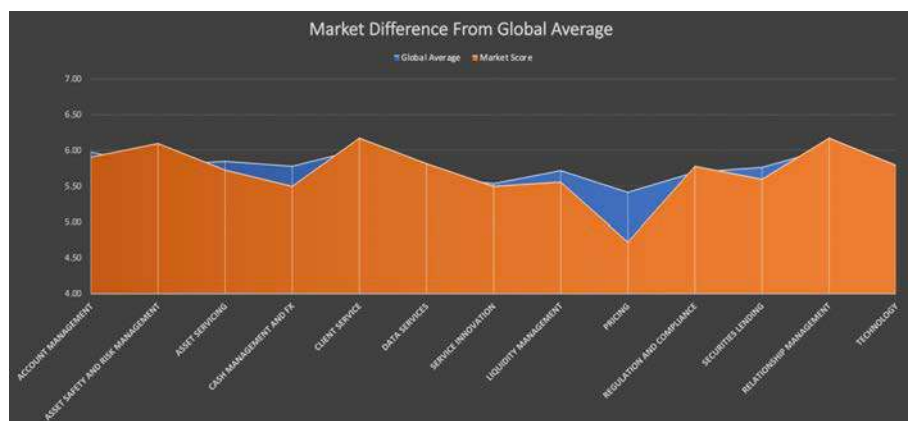
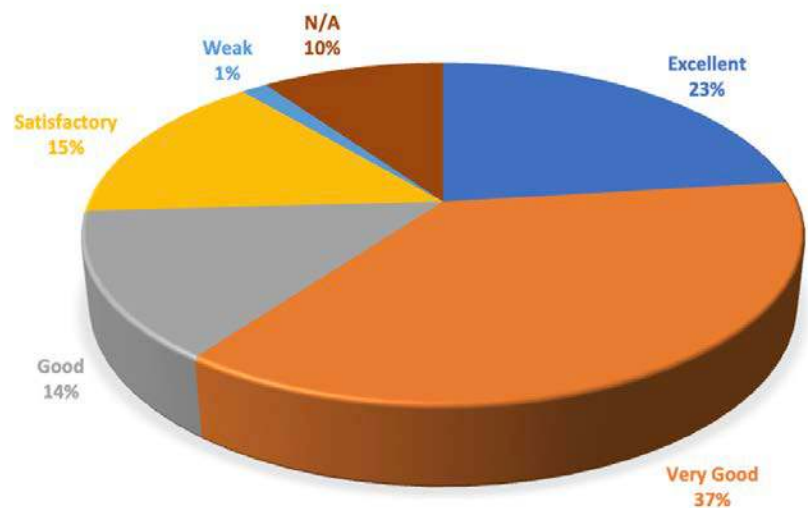
“Client Service has always been excellent from Paribas Budapest, hence the high rating,” says one UK fund manager. “This continues to be the case.”

In 2022, BNP Paribas introduced a centralised booking model for the Hungarian market. The model links the bank's French office directly with accounts at Europe's CSDs. Clients receive a multi-local service by contracting with only one legal entity. Typically, clients would have multiple securities accounts in France (one per market) linked to a single cash account for settlement.

To enable this, BNP Paribas has obtained direct membership of KELER and become a General Clearing Member at the Hungarian CCP.

Hungary	BNP Paribas	Market Score	Global Average
Account Management	6.00	5.91	5.98
Asset Safety and Risk Management	5.67	6.10	5.80
Asset Servicing	5.67	5.73	5.85
Cash Management and FX	5.17	5.50	5.78
Client Service	6.33	6.18	6.02
Data Services	5.83	5.82	5.65
Service Innovation	5.60	5.50	5.54
Liquidity Management	5.17	5.56	5.72
Pricing	5.33	4.73	5.42
Regulation and Compliance	6.00	5.78	5.70
Securities Lending	5.67	5.60	5.77
Relationship Management	6.33	6.18	6.03
Technology	5.50	5.80	5.58
Average	5.71	5.72	5.76

SPREAD OF OPINION



India

India	BNP Paribas	DBS Bank	Deutsche Bank	Edelweiss	ICICI Bank	SBISG Global Securities Services	Standard Chartered Bank	Market Score	Global Average
Account Management	6.92	7.00	6.78	7.00	6.15	6.94	5.95	6.54	5.98
Asset Safety and Risk Management	6.92	6.82	6.22	7.00	6.27	6.94	5.80	6.45	5.80
Asset Servicing	6.92	6.82	6.48	7.00	6.24	6.92	5.55	6.42	5.85
Cash Management and FX	6.91	6.82	6.33	7.00	6.18	6.85	6.05	6.44	5.78
Client Service	6.92	6.82	6.48	7.00	6.24	6.94	6.00	6.51	6.02
Data Services	6.92	7.00	6.15	7.00	5.93	6.87	4.78	6.29	5.65
Service Innovation	6.75	6.82	5.95	7.00	5.76	6.67	5.05	6.17	5.54
Liquidity Management	7.00	7.00	5.86	7.00	5.83	6.80	5.06	6.26	5.72
Pricing	6.82	6.94	6.31	7.00	6.18	6.94	4.91	6.28	5.42
Regulation and Compliance	6.92	6.82	6.27	7.00	5.94	6.85	5.55	6.31	5.70
Securities Lending	7.00	7.00	5.70	7.00	6.22	6.90	5.11	6.46	5.77
Relationship Management	6.92	6.82	6.48	7.00	6.09	7.00	5.86	6.47	6.03
Technology	6.88	6.82	5.42	7.00	5.80	6.92	5.45	6.16	5.58
Average	6.91	6.88	6.19	7.00	6.06	6.89	5.47	6.37	5.76

Custodians in India traditionally score highly and this year is no exception.

BNP Paribas

BNP Paribas’ has raised its overall category average from an already impressive 6.00 in 2021 to 6.91 this year.

Deutsche Bank

Deutsche Bank returns with a set of results primarily in Very Good territory (6.00-6.99). Only Technology and Securities Lending fall below the global category average.

DBS Bank

DBS high scores remain close to last year’s with four sevens – the highest possible score in the survey.

Edelweiss Capital Services

Edelweiss has again produced a clean sweep of sevens.

ICICI Bank

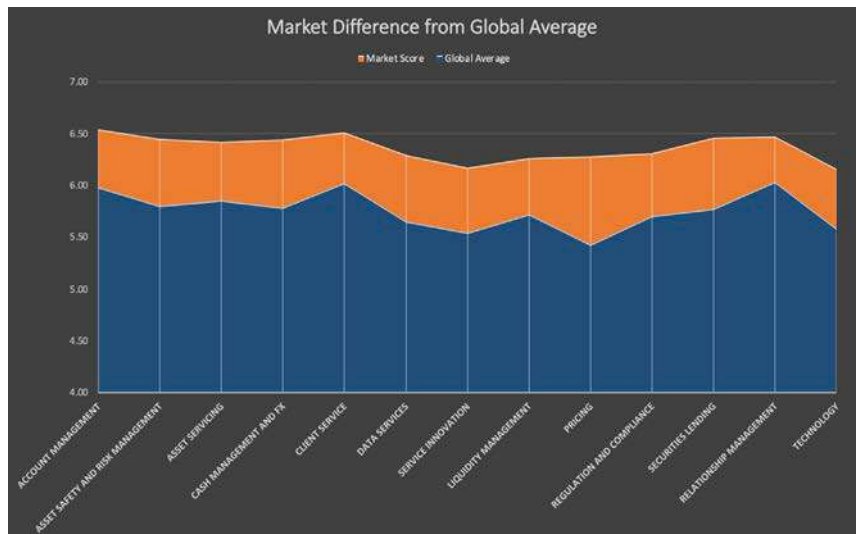
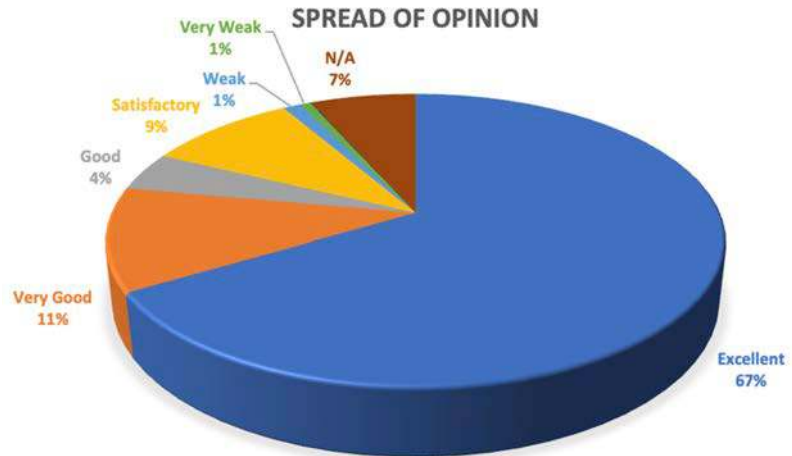
ICICI records a solid set of scores, though a few have dipped into the upper-fives this year.

SBISG Global Securities Services

Despite last year’s impressive results, SBISG Global Securities Services has seen measurable improvements in 2022 with Technology a standout category.

Standard Chartered

With most categories in the Good range, SCB’s scores in India are down on last year, though above the global average for Cash Management and FX.



Indonesia

Responses were received this year for Standard Chartered, HSBC and Deutsche Bank. Overall, the market category scores have improved, falling comfortably in the Good range. Only Pricing remains below 5.00 and even then, has managed a small uptick on 2021. The pattern of scores in Indonesia follows that of the global average though a few decimal points below that benchmark.

This year, Standard Chartered reaches the threshold for a write up.

Standard Chartered

Standard Chartered is one of the oldest banks in Indonesia with 161 years of history and 31 years of custody presence. Based on total AUC, it claims a 20% market share of overall AUC in Indonesia and the largest market share for multishare-class funds in the market.

It is one of two foreign custodian banks to have a direct interface with both central depositories (KSEI C-BEST & Bank Indonesia BI-SSSS). “We continue to demonstrate our industry thought leadership and advocacy by participating in key industry events and working groups, sharing our best practices, our take on industry trends and themes, and proposing changes that would benefit our clients,” says the bank.

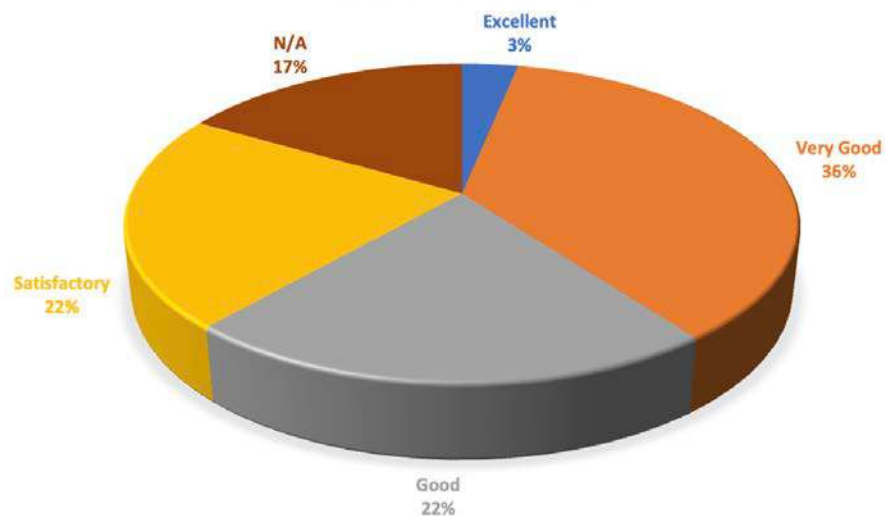
Standard Chartered recently realigned its client facing functions with the creation of Financing & Securities Services (FSS) Client Solutions, bringing together resources and expertise from implementation, client services, local business account management as well as prime services client solutions and operations support, into one team.

The bank exceeds the market average in all but three categories: Asset Servicing, Regulation and Compliance and Technology. Its highest scores are for client-facing functions. “Smooth relationship, good reactivity when needed,” says one European bank of Client Service. Another praises response turnaround.

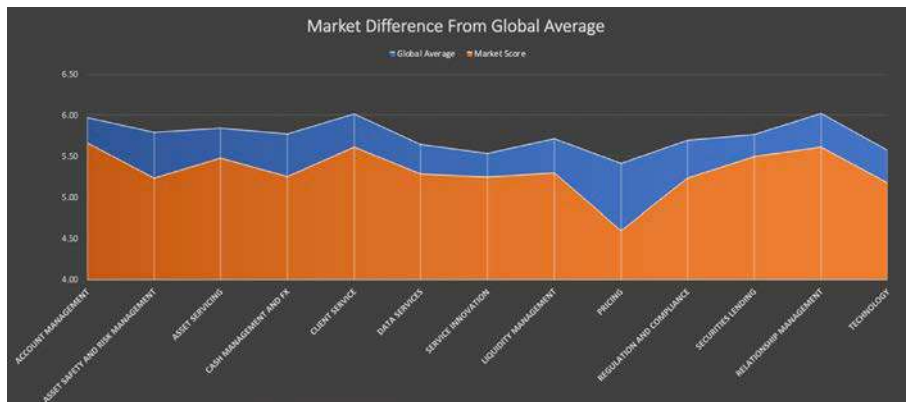
The only criticism comes from one European global custodian and regards Cash Management and FX. While the quality of the service is good overall, this bank suggests that “a tightening of the deadline to provide forex details regarding invoices issued in local currency” would be welcomed.

Indonesia	Standard Chartered	Market Score	Global Average
Account Management	5.90	5.67	5.98
Asset Safety and Risk Management	5.50	5.24	5.80
Asset Servicing	5.40	5.48	5.85
Cash Management and FX	5.50	5.26	5.78
Client Service	5.90	5.62	6.02
Data Services	5.50	5.29	5.65
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Securities Lending	5.50	5.50	5.77
Relationship Management	5.90	5.62	6.03
Technology	5.11	5.18	5.58
Average	5.46	5.33	5.76

SPREAD OF OPINION



Market Difference From Global Average



Malaysia

Scores overall have risen for Malaysian providers, three of which – HSBC, Maybank Securities Services and Standard Chartered – record responses this year, with the last of these two reaching the threshold for its scores to be listed. Thirty-eight percent of individual category ratings across all providers are either Excellent (7) or Very Good (6).

While an equal number of responses were recorded from Europe and Asia, the former included a number of larger institutions and these were on the whole slightly more generous in the scores they awarded.

Standard Chartered

Malaysia’s first and oldest bank with more than 140 years of history and 30 years of custody presence, Standard Chartered claims to be the only bank to provide end-to-end securities services solutions across conventional and Islamic banking via Standard Chartered Bank Berhad and Standard Chartered Saadiq Berhad. It is also the only foreign bank granted with a licence to act as MYR settlement bank for Bursa Malaysia across equities and derivatives. It also chairs the Malaysian Securities Market Practice Group.

Account Management, Client Service and Relationship Management all record results above 6.00. “We are grateful for the speedy response to inquiries and accurate follow-up,” says one Asia-based broker.

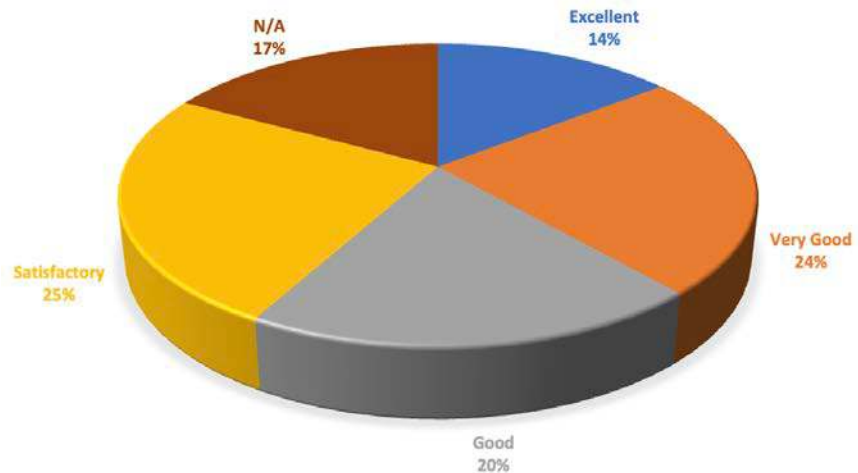
At the other end of the scale are Liquidity Management, Pricing and Technology, though even these are comfortably within the Good range (5.00).

Maybank

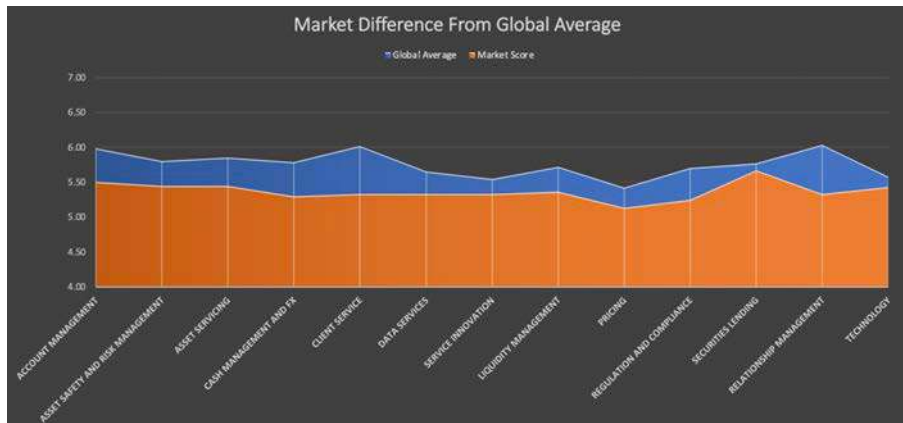
Maybank provides a full range of custody services under the umbrella of Maybank Securities Solutions, including risk, performance and ESG reporting. To domestic clients it also offers access to international markets through a partnership with a global custodian. Although it does offer sub-custody, its domestic custody client base is the foundation of its business. It estimates its share of inbound third-party clientele at 10%.

Malaysia	Standard Chartered	Market Score	Global Average
Account Management	6.29	5.5	5.98
Asset Safety and Risk Management	5.86	5.44	5.80
Asset Servicing	5.86	5.44	5.85
Cash Management and FX	5.50	5.29	5.78
Client Service	6.14	5.33	6.02
Data Services	5.50	5.33	5.65
Service Innovation	5.50	5.33	5.54
Liquidity Management	5.40	5.36	5.72
Pricing	5.40	5.13	5.42
Regulation and Compliance	5.67	5.24	5.70
Securities Lending	5.50	5.67	5.77
Relationship Management	6.14	5.33	6.03
Technology	5.40	5.43	5.58
Average	5.70	5.37	5.76

SPREAD OF OPINION



Market Difference From Global Average



Philippines

In October, the Securities and Exchange Commission (SEC) of Philippines began a period as co-chair of the ASEAN Working Committee-Capital Market Development, established with the vision of achieving cross-border collaboration among capital markets in ASEAN. High on its agenda is greater intermarket connectivity.

Deutsche Bank, HSBC and Standard Chartered record responses for their Philippines service this year with Standard Chartered qualifying for the publication of its results. Overall, it is one of the lower scoring markets in this year's survey. In terms of individual category ratings, the largest number (46%) fall within the Satisfactory range (4.00-4.99).

Compared to 2021, scores have held more or less steady, straddling the boundary between Good and Satisfactory. Category scores are in a narrow range with Account Management and Relationship Management at the top of the order (5.11) and Pricing (4.53) at the bottom.

Standard Chartered

Standard Chartered was the first foreign bank in the Philippines, established there a century and a half ago. It has been offering custody in the market for the past 30 years.

“Having grown our AUC by over 100% in 2021 (or almost double from pre-pandemic levels), we expect to continue growing with new mandates from banks and asset managers,” says the bank.

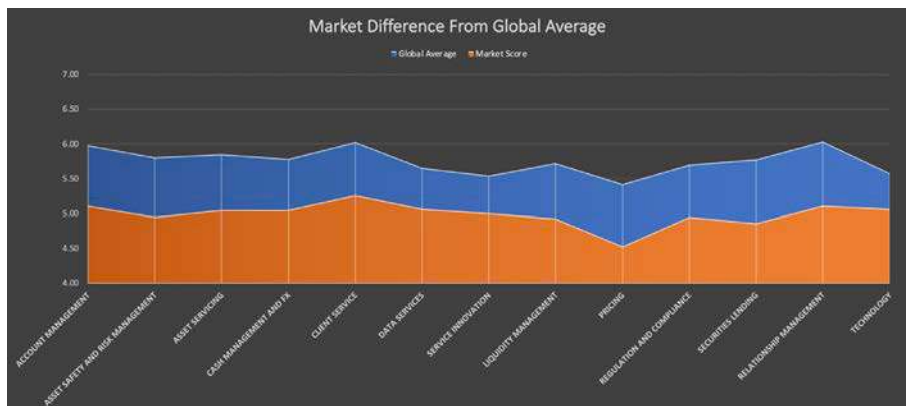
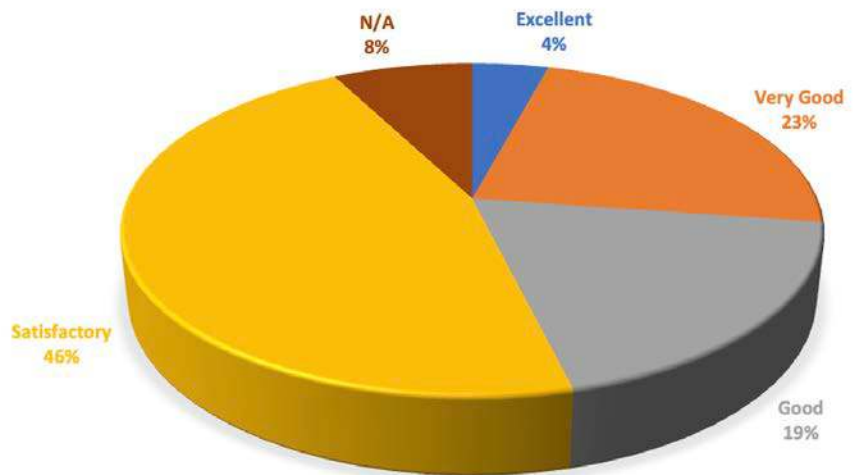
It points out that it was the first custodian bank to introduce the Bangko Sentral Registration Document (BSRD) system, which provides fully automated recording, daily reconciliation, pre-deal checks and reporting of client transactions with the BSP, the Philippines central bank.

“We continue to make investments into technology, especially in robotics initiatives,” the bank reports. “This includes automation of pre-matching processes, auto-settlement between our securities platform and the equities depository, and a fund services price injection process.”

Scores are, on the whole, not supported by additional client comment, though one Asia-based client says Standard Chartered provides “good quality services and are proactive in providing actionable recommendations when we have any issues.”

Philippines	Standard Chartered	Market Score	Global Average
Account Management	5.20	5.11	5.98
Asset Safety and Risk Management	4.90	4.95	5.80
Asset Servicing	4.90	5.05	5.85
Cash Management and FX	4.90	5.05	5.78
Client Service	5.60	5.26	6.02
Data Services	5.13	5.06	5.65
Service Innovation	5.00	5.00	5.54
Liquidity Management	4.70	4.93	5.72
Pricing	4.60	4.53	5.42
Regulation and Compliance	4.90	4.95	5.70
Securities Lending	5.00	4.86	5.77
Relationship Management	5.30	5.11	6.03
Technology	5.00	5.06	5.58
Average	5.01	4.99	5.76

SPREAD OF OPINION



Poland

In January 2022, a new relief-at-source procedure was implemented, changing both the scope and the documents required.

As of January 2023, interest and redemptions paid on State Treasury bonds with maturity no shorter than a year and traded on a regulated market or introduced to an alternative trading system will be exempted from withholding tax.

Meanwhile, KDPW, the Polish CSD, has introduced a DLT-based system for e-voting, including advising issuers on who is entitled to vote. “Issuers continue to advise of meetings via KDPW’s interface (often omitting details of the agendas and resolutions) and only directing us to their website for further details (to meet minimal criteria under SRD II),” says BNP Paribas. “Although we augment such notifications, this situation is sub-optimal and hence custodian banks are recommending changes through both the Custodian Council and the Banking Association.”

The Ministry of Finance is preparing a strategy for capital market development, including new rules for digital securities. This is expected to be finalised in 2023.

The responses recorded for Poland were distributed across a relatively large number of providers, including Bank Pekao, ING Bank Slaski, Raiffeisen Bank International, Citi, Unicredit and BNP Paribas. As a result, only one, BNP Paribas, amasses sufficient to reach the threshold for a write up.

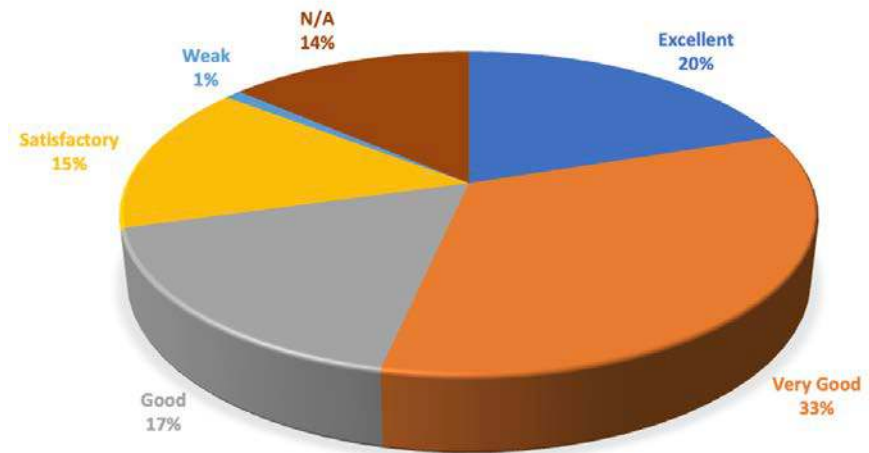
The market as a whole tracks fairly close to the global average in this year’s survey, exceeding it in a few categories, notably Relationship Management and Client Service.

BNP Paribas

The bank claims a 28% share of third-party business in the Polish market. Its results are up on 2021 and at a category level, it exceeds all market and global averages. “We have substantially reinforced our footprint in the different regions, which enables us to deploy new account management models, leveraging both our local teams and our international operational centres in each main time zones (Paris, Lisbon, Chennai, New York),” the bank explains.

Poland	BNP Paribas	Market Score	Global Average
Account Management	6.00	5.72	5.98
Asset Safety and Risk Management	6.23	5.88	5.80
Asset Servicing	6.00	5.52	5.85
Cash Management and FX	5.77	5.48	5.78
Client Service	6.62	6.12	6.02
Data Services	5.90	5.39	5.65
Service Innovation	5.83	5.42	5.54
Liquidity Management	5.73	5.47	5.72
Pricing	5.69	4.92	5.42
Regulation and Compliance	6.10	5.57	5.70
Securities Lending	6.00	5.88	5.77
Relationship Management	6.62	6.20	6.03
Technology	5.83	5.17	5.58
Average	6.02	5.60	5.76

SPREAD OF OPINION



Market Difference From Global Average



Qatar

Last year we reported that the Investment Promotion Agency Qatar and Qatar Stock Exchange (QSE) had signed a Memorandum of Understanding to serve as a launchpad for boosting the attractiveness of the Qatari market to foreign investors.

Since then, although most of the media coverage of Qatar has focused on the football World Cup (well done, Argentina), initiatives in the securities market have continued.

In an interview with Bloomberg in June, the CEO of the QSE said the exchange was planning initiatives, including including allowing investors to lend and borrow securities.

The exchange is “engaged with regulators and policy makers for market development by bringing in tools like short selling, securities lending and borrowing,” Mohsin Mujtaba, director of the product and market development department, told Bloomberg.

Ratings were received this year for HSBC and Standard Chartered with the former qualifying for individual assessment. Whether or not attention was diverted in the run up to the World Cup, scores are down on 2021 with an overall market average of 5.07 compared to 5.80 last year. Category scores for the most part fall within a narrow range from the upper end of Satisfactory to the lower end of Good.

HSBC

HSBC first opened its doors for business in Qatar in 1954. It has been providing sub-custody and clearing services to foreign clients in Qatar since December 1998, when the market first opened to foreign investors.

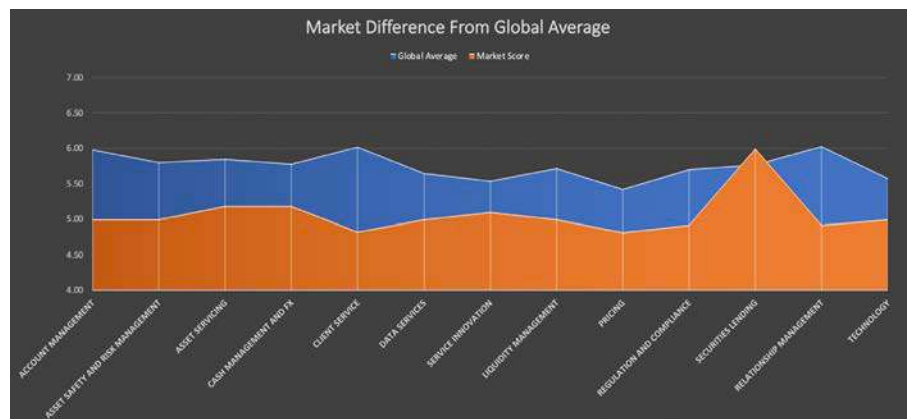
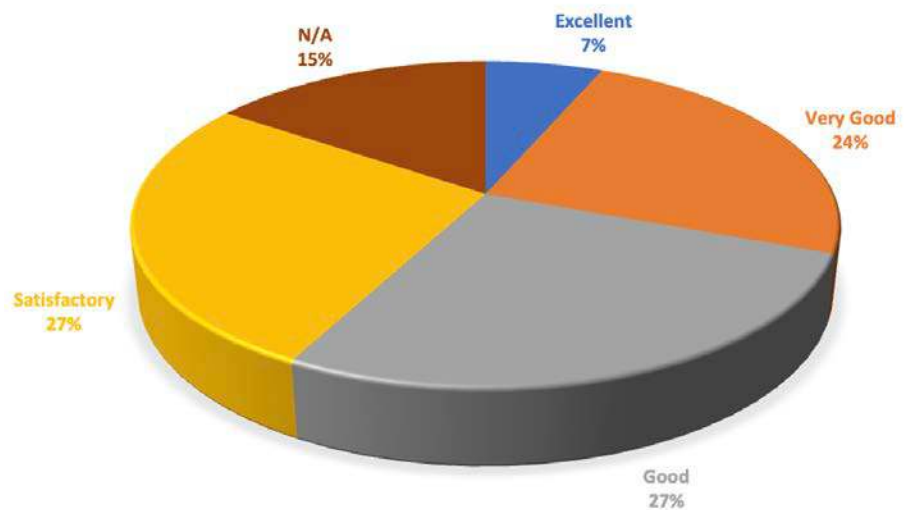
Unrated in 2021, it has this year achieved an overall category average of 5.13. Only two service areas, Client Service and Pricing, are a little below the Good threshold (5.00).

Standard Chartered

Standard Chartered Bank was the first bank to open in Qatar when it established a presence in 1950. It claims to be the only custodian in the market providing proxy services and the first to offer a custody service for ETFs.

Qatar	HSBC	Market Score	Global Average
Account Management	5.09	5.00	5.98
Asset Safety and Risk Management	5.09	5.00	5.80
Asset Servicing	5.18	5.18	5.85
Cash Management and FX	5.18	5.18	5.78
Client Service	4.91	4.83	6.02
Data Services	5.00	5.00	5.65
Service Innovation	5.11	5.10	5.54
Liquidity Management	5.20	5.00	5.72
Pricing	4.90	4.82	5.42
Regulation and Compliance	5.00	4.92	5.70
Securities Lending	6.00	6.00	5.77
Relationship Management	5.00	4.92	6.03
Technology	5.00	5.00	5.58
Average	5.13	5.07	5.76

SPREAD OF OPINION



Saudi Arabia

Within the past decade, the Saudi securities market has continued to add flesh to the bone of its rapprochement with global securities markets.

In October 2021, Euroclear and Saudi Arabia’s Securities Depository Center Company (Edaa) agreed to launch a link enabling international investors access to the local sukuk and bond markets.

The link will provide an additional channel for international investors to access the sukuk and bond markets listed on the Saudi Exchange (Tadawul) as they can settle domestically issued bonds via Euroclear Bank’s direct account.

Eligible international investors will benefit from internal settlement and safekeeping of Saudi government and quasi-government bonds listed on the Saudi Exchange, without the need to apply for QFI status.

They will also be able to use such securities as collateral for financing activities.

Custodians have also been increasing their presence in the Kingdom though with more of an eye on servicing the asset pools in the region rather than inbound institutional investment.

Northern Trust, for example, has an operation in Riyadh providing services to more than 330 clients with over \$2.5 trillion in assets under custody, while BNY Mellon and SNB Capital are collaborating on a data management solution to enable client organisations to centralise and manage complex investment assets via a centralised data repository that meets the Kingdom’s data-localisation requirements.

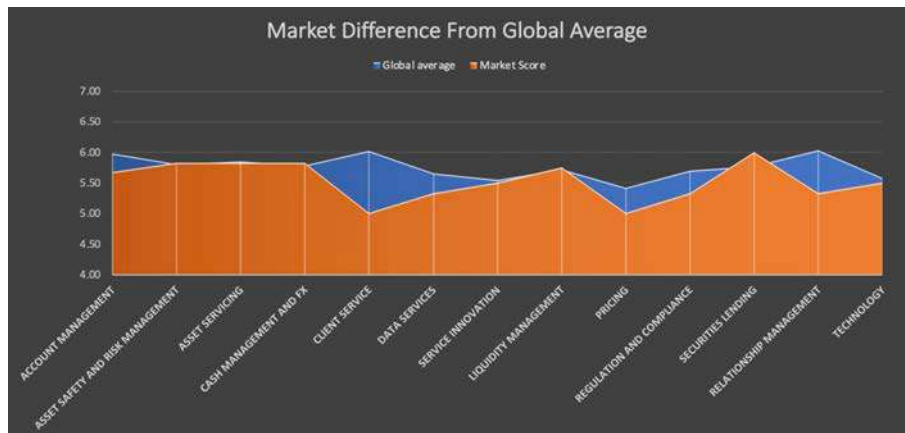
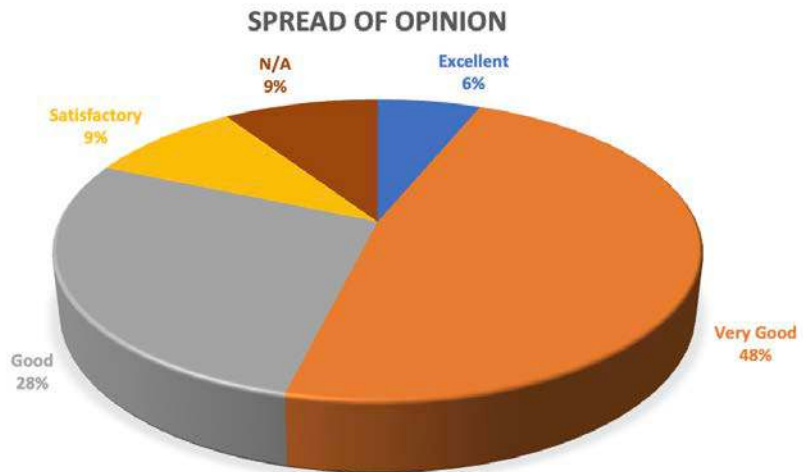
From a sub-custody perspective, scores for Saudi Arabia were recorded for HSBC and First Abu Dhabi Bank with the former qualifying for individual assessment.

As access to investment opportunities increases, the likelihood is that the sub-custody universe will expand, Citi having already established a sub-custody operation in the market in 2019.

HSBC

HSBC has recorded category scores mostly in Good range though unusually Client Service is only 4.80. Unusually, Securities Lending provides the custodian’s best result at 6.00. In most markets these two scores would be reversed.

Saudi Arabia	HSBC	Market Score	Global Average
Account Management	5.60	5.67	5.98
Asset Safety and Risk Management	5.60	5.83	5.80
Asset Servicing	5.80	5.83	5.85
Cash Management and FX	5.80	5.83	5.78
Client Service	4.80	5.00	6.02
Data Services	5.20	5.33	5.65
Service Innovation	5.40	5.50	5.54
Liquidity Management	5.75	5.75	5.72
Pricing	5.00	5.00	5.42
Regulation and Compliance	5.20	5.33	5.70
Securities Lending	6.00	6.00	5.77
Relationship Management	5.20	5.33	6.03
Technology	5.60	5.50	5.58
Average	5.46	5.53	5.76



South Africa

South Africa is one of the few markets in the ABEM survey with a large cohort of providers split between international and domestic banks. Responses have been received for Standard Bank, Nedbank, RMB, Standard Chartered and ABSA, with RMB and Standard Chartered crossing the threshold for individual assessment.

The market has taken steps to get to grips with digital assets. The FSCA, the regulator, has classified cryptocurrency assets as financial products enabling them to be regulated. This was the first legal step required to bring the crypto asset industry within the South African legal framework. The FSCA has put a temporary exemption in place to allow a transition period for crypto asset service providers to obtain their licences.

Results as a whole are similar to 2021, though up a few basis points overall.

FirstRand Bank Limited (RMB Custody Services)

RMB has not repeated the heights of last year's scores (average 6.71 in 2021), but remains above the market average in all categories, particularly Service Innovation and Pricing. It also exceeds the global average in three service areas: Account Management, Asset Servicing and Pricing. With regards to the first of these, one large Europe-based respondent describes the bank as having "very responsive, helpful and competent account managers".

Standard Chartered

All category scores are comfortably within the Good range (5.00-5.99), apart from Pricing (4.88), suggesting that the bank is seen as relatively expensive, though not unduly so for the survey as a whole. Pricing is also the only rated category where Standard Chartered falls below the market average.

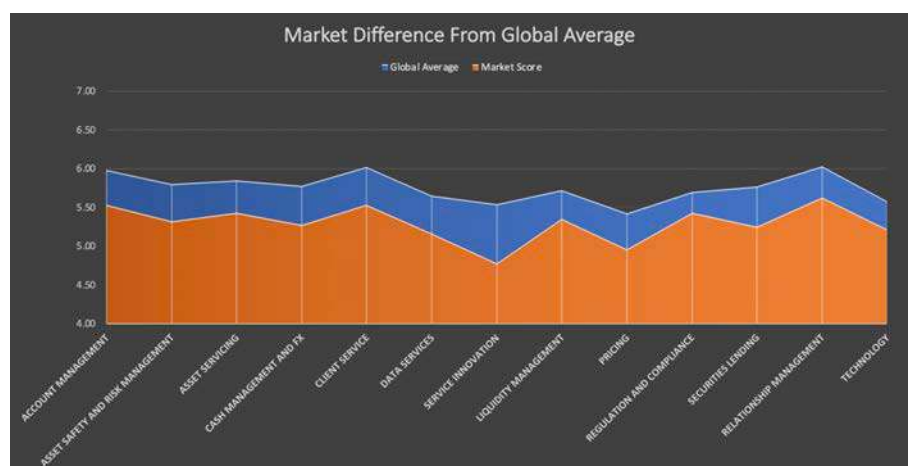
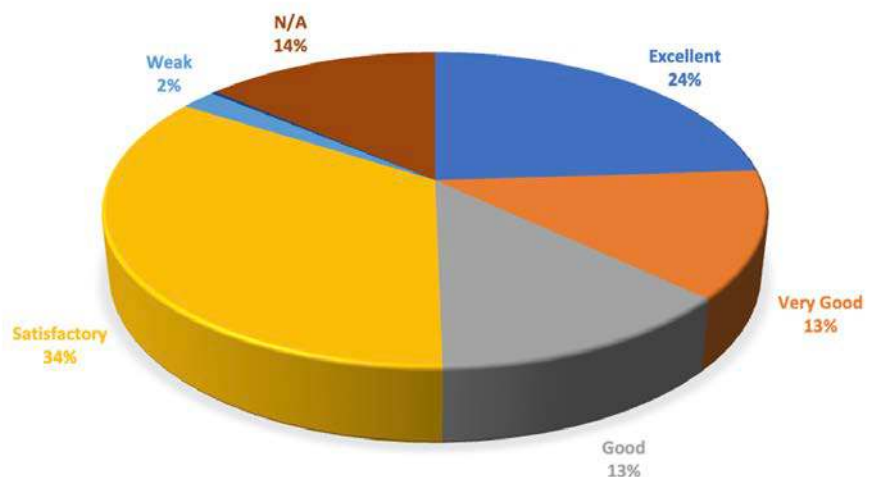
One offshore fund manager comments, "What's important from our perspective is safety and risk and Standard Chartered is on the top. We do sometimes feel it over the top but with how the world is moving we fully understand."

Other

Though with insufficient responses for a rating one client was particularly effusive about Nedbank with regard to Asset Servicing: "Amazing service from this custodian."

South Africa	FirstRand Bank Limited (RMB Custody Services)	Standard Chartered	Market Score	Global Average
Account Management	6.00	5.78	5.53	5.98
Asset Safety and Risk Management	5.57	5.56	5.32	5.80
Asset Servicing	5.86	5.89	5.43	5.85
Cash Management and FX	5.71	5.86	5.27	5.78
Client Service	6.00	5.67	5.53	6.02
Data Services	5.40	5.25	5.16	5.65
Service Innovation	5.40	5.00	4.78	5.54
Liquidity Management	5.50	5.83	5.35	5.72
Pricing	5.67	4.88	4.96	5.42
Regulation and Compliance	5.57	5.89	5.43	5.70
Securities Lending	5.50	5.50	5.25	5.77
Relationship Management	6.00	5.89	5.63	6.03
Technology	5.50	5.63	5.22	5.58
Average	5.67	5.59	5.30	5.76

SPREAD OF OPINION



Taiwan

Taiwanese agent banks in aggregate have improved on last year’s results with an average rising from 5.16 to 5.30. Some 46% of individual category ratings are either Very Good (6) or Excellent (7). In general, the market tracks the ups and downs of the global category averages, though at a lower level.

Deutsche Bank, HSBC, Citi and Standard Chartered all receive ratings for Taiwan in this year’s ABEM survey. Standard Chartered qualifies for individual assessment.

Standard Chartered

One of the first international banks in Taiwan with 37 years of history and 30 years of custody presence, Standard Chartered has the largest local branch network (58 branches) of any international bank in Taiwan. Its on-the-ground operational staff support both domestic and cross-border investments of local mutual funds and insurance funds.

It also claims, since 2019, to have recorded the highest growth rate in market share for inbound sub-custody business. “Our market share of Foreign Institutional Investor (FINI) clients at end Q3 2022 ranks #1 in the market,” says the bank.

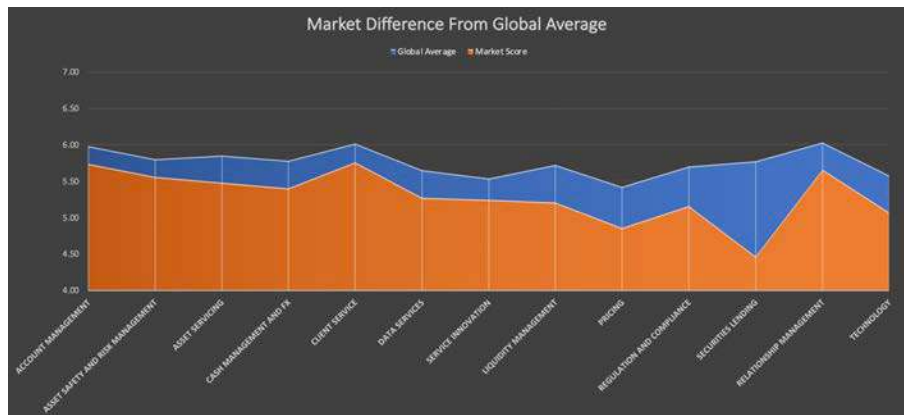
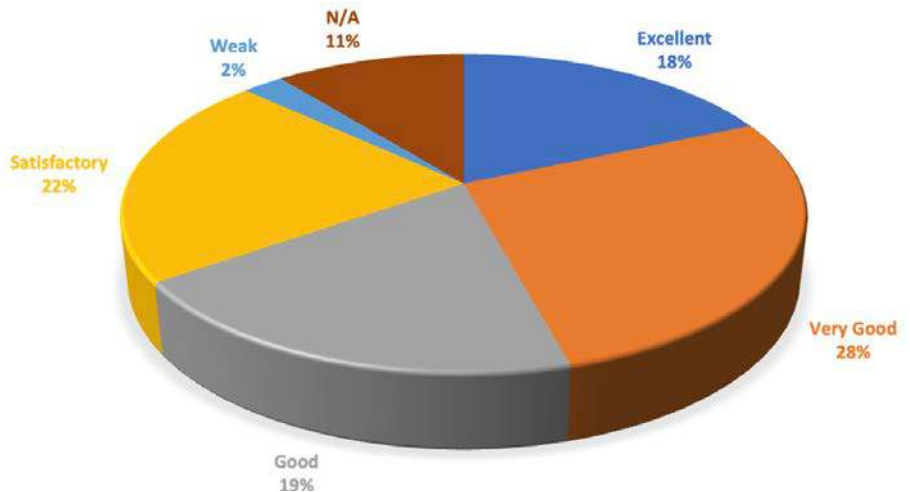
Standard Chartered records a solid set of scores in Good and Very Good territory, exceeding the market average in all areas, most notably Client Service, Relationship Management and Asset Safety.

With regard to Account Management, one European bank observes, “Taiwan is the most dangerous market for us a client, when it comes to the settlement risks. SCB Taiwan is doing an extraordinarily good job and as such they deserve the top rating.”

While Technology is one of its lower scoring service areas – “Limited good technology solutions available to clients at present,” says one global custodian – this could change with the introduction of API connectivity and co-creation with TDCC, the local CSD, of digital start-of-day securities position reporting. In our experience, such IT developments take a couple of years to feed through to survey scores.

Taiwan	Standard Chartered	Market Score	Global Average
Account Management	6.34	5.74	5.98
Asset Safety and Risk Management	6.06	5.56	5.80
Asset Servicing	5.91	5.48	5.85
Cash Management and FX	5.87	5.40	5.78
Client Service	6.31	5.76	6.02
Data Services	5.60	5.27	5.65
Service Innovation	5.48	5.24	5.54
Liquidity Management	5.40	5.21	5.72
Pricing	5.10	4.86	5.42
Regulation and Compliance	5.38	5.16	5.70
Securities Lending	4.50	4.46	5.77
Relationship Management	6.19	5.66	6.03
Technology	5.19	5.07	5.58
Average	5.64	5.30	5.76

SPREAD OF OPINION



Thailand

Two agent banks, HSBC and Standard Chartered, have received ratings this year for Thailand, though the latter dominates. Overall category scores for the market are similar to 2021 with all results squarely in Good territory (5.00-5.99).

Standard Chartered

Standard Chartered describes itself as a leading foreign bank in Thailand with the largest market share for both sub-custody and domestic custody. “We hold 34% market share on AUC, with US\$80 billion for our sub-custody cross-border business,” says the bank. “We also hold the largest market share among foreign banks for domestic custody (approximately 6% market share).”

Average AUC has increased in 2022 by 5%, while transaction volumes are up by 29%. SCB is also the largest volume clearer in the market, with 26% market share, processing more than one million transactions in 2022.

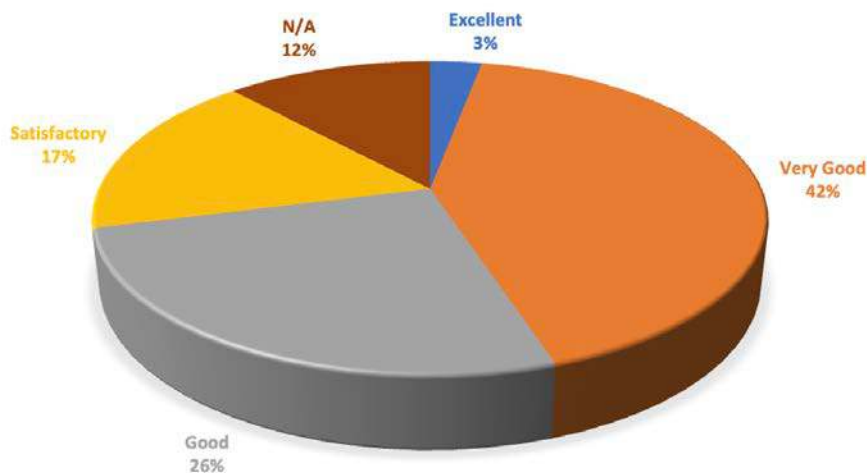
Standard Chartered’s scores, both overall and at a category level, are similar to last year, if a few basis points lower in a number of service areas. Bucking the trend is Technology, where results are up 0.28 points to 5.41.

“Across sub-custody and hub markets, Standard Chartered has implemented an integrated custody solution, fully interfaced with SWIFT, asset servicing capabilities, cash system and our internal portal,” the bank explains. “This single platform with standardised capabilities ensures client experience consistency across markets.” At the same time, it allows for greater scalability with the ability to absorb volume spikes, while accelerating system enhancements across the custodian’s network.

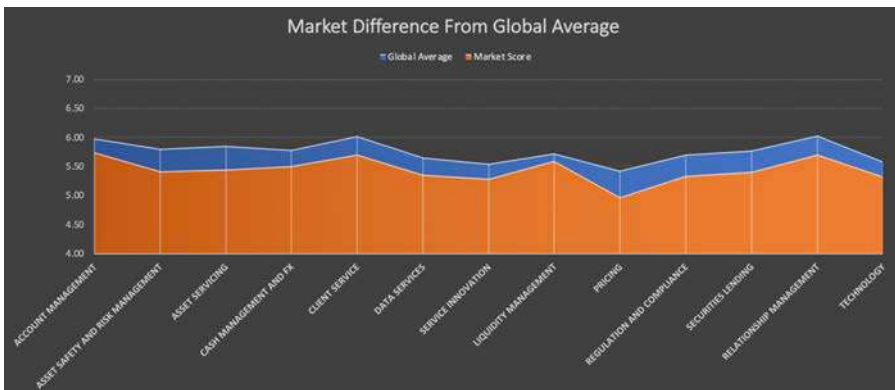
“We are in very good hands with SCB in the Thai market,” says one European bank. “We have SCB in various markets as a custodian - mainly in Asia. We are very happy with the service provided. SCB does offer direct access to the market as well as hub model. We prefer direct access and SCB can offer this in most markets.”

Thailand	Standard Chartered	Market Score	Global Average
Account Management	5.91	5.74	5.98
Asset Safety and Risk Management	5.50	5.41	5.80
Asset Servicing	5.55	5.44	5.85
Cash Management and FX	5.63	5.5	5.78
Client Service	5.86	5.7	6.02
Data Services	5.47	5.35	5.65
Service Innovation	5.35	5.28	5.54
Liquidity Management	5.59	5.59	5.72
Pricing	4.95	4.96	5.42
Regulation and Compliance	5.41	5.33	5.70
Securities Lending	5.40	5.4	5.77
Relationship Management	5.86	5.7	6.03
Technology	5.41	5.32	5.58
Average	5.53	5.44	5.76

SPREAD OF OPINION



Market Difference From Global Average



Turkey

Four banks – Citi, Deutsche Bank, BNP Paribas and Türkiye İis Bankası – receive ratings this year, which at a market level, are measurably up on last year’s already strong scores. As such, Turkey is one of the stronger markets in the survey from a customer perception perspective.

The accompanying Market Difference chart shows the extent to which the market outperforms the global average. Once again, Deutsche Bank and BNP Paribas – through its local TEB Securities Services business – qualify for individual ratings.

Under the local and global uncertain outlook, regulatory bodies have continued to show a restrictive approach to FX, which has impacted capital markets business, says one service provider. At the same time, it identifies developments related to Borsa Istanbul Futures and Options Market, both extending the product range and introducing more stringent risk management.

BNP Paribas/ TEB Securities Services

BNP Paribas describes 2022 as “a year where the non-resident institutional investor base that has been dominating the market for the last two decades has shrunk to below 30% of free float at BIST Equities Market”.

The gap has been filled by local retail as well as institutional investors, carrying Borsa Istanbul to record growth. As a result, in addition to local custodial services for non-resident financial intermediaries, TEB is offering a very successful bundled local broker-to-custody product for listed derivatives and a growing set of fund services presented to local asset managers.

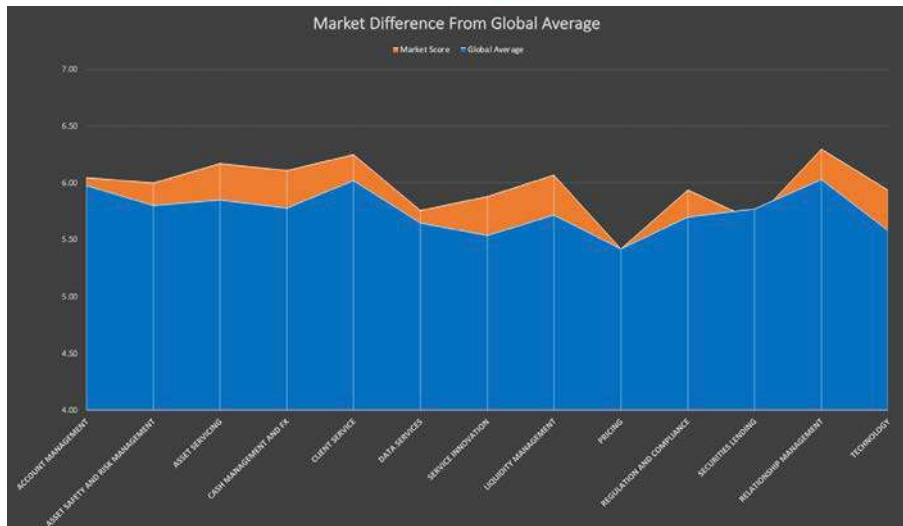
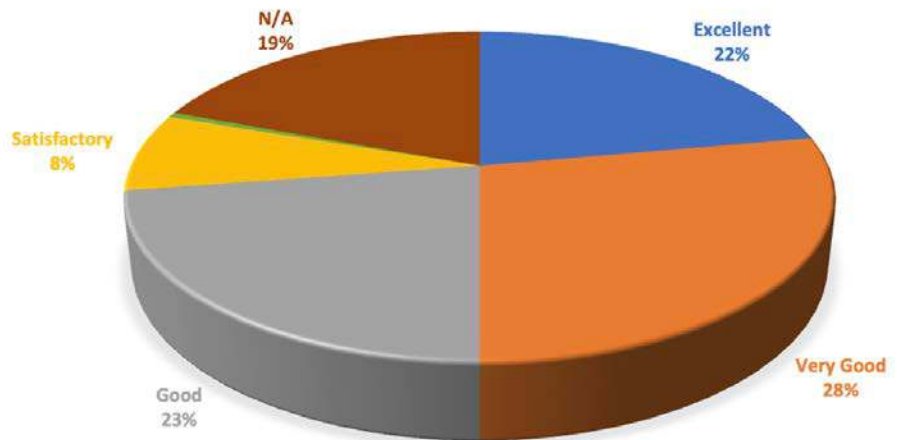
Its results have seen a marked improvement over 2021 with seven categories rated Very Good and the remainder well within the Good range.

Deutsche Bank

It is hard to demonstrate consecutive improvement on impressive results, but Deutsche Bank in Turkey has managed it this year. Nearly all category scores are in the Very Good range (6.00-6.99) and some – Asset Safety and Risk Management, Asset Servicing and Cash Management and FX – are in the top quartile for the survey as a whole.

Turkey	BNP Paribas	Deutsche Bank	Market Score	Global Average
Account Management	6.22	6.13	6.05	5.98
Asset Safety and Risk Management	5.67	6.80	6.00	5.80
Asset Servicing	6.11	6.67	6.17	5.85
Cash Management and FX	6.00	6.67	6.11	5.78
Client Service	6.33	6.50	6.25	6.02
Data Services	5.56	6.33	5.76	5.65
Service Innovation	5.63	6.50	5.88	5.54
Liquidity Management	6.00	6.60	6.07	5.72
Pricing	5.44	5.71	5.42	5.42
Regulation and Compliance	5.75	6.50	5.94	5.70
Securities Lending	6.00	5.50	5.67	5.77
Relationship Management	6.44	6.38	6.30	6.03
Technology	5.86	6.29	5.94	5.58
Average	5.92	6.35	5.97	5.76

SPREAD OF OPINION



Czech Republic

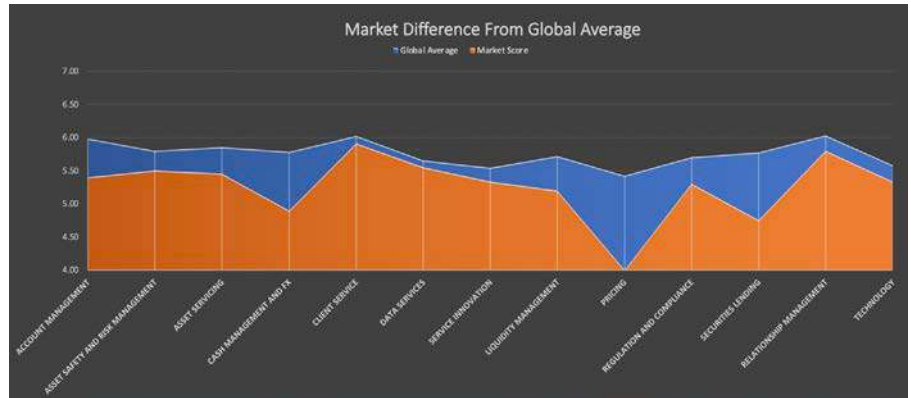
After the adoption of CSDR and related SDR features, the local CSD established a link to T2S to enable settlement of Czech securities issued in euros to settle DvP in euros, in central bank money. Prior to this, commercial bank settlement required pre-funding of euro-based settlements. Client Service and Relationship Management are close to the global average, though the market is considered expensive according to this year's respondents.

Responses were received for CSOB, BNP Paribas, Raiffeisen Bank International and UniCredit.

CSOB

The largest bank in the Czech Republic and the largest CZK clearing bank, CSOB is part of the KBC Group. As such, the bank claims to offer the best cash deadlines in the market.

CSOB is in the process of finalising a



new online platform to replace its Custody Online offering. The new platform, CEB Custody, is based on CEB (CSOB Electronic Banking) and primarily designed for local, non-SWIFT clients, but will also be available as a back-up tool for foreign clients in the future.

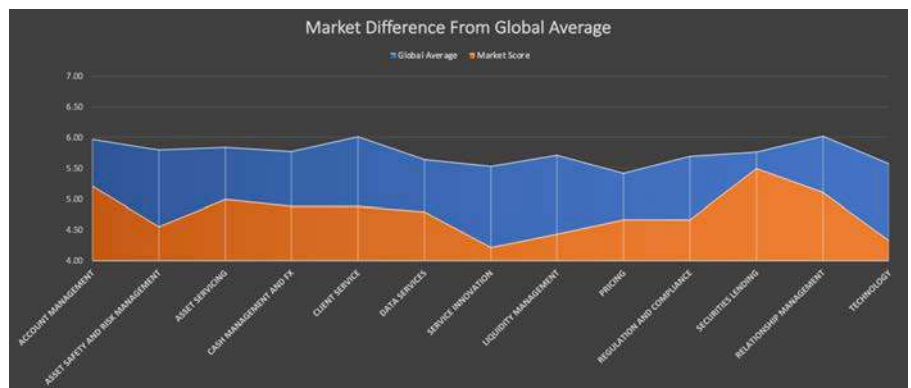
Mexico

Similar to last year, when Mexico returned to the survey after a year's absence, responses were received for Citi and Banco S3 Mexico, part of the CA-CEIS Group though neither reached the threshold for an individual assessment.

Although scores are again at the lower end - relatively speaking - four categories - Account Management, Asset Servicing, Relationship Management and Securities Lending, are rated Good and the overall average for the market has risen from 4.47 in 2021 to 4.79 this year.

The relatively high score for Securities Lending bucks the global trend as this is an area where service in emerging markets is often regarded as underwhelming. Conversely, Technology is seen as something of a weak point, scoring only 4.33 overall.

Additional comments from clients to



support the ratings awarded are few, though one sizeable Europe-based institution is complimentary of the service it receives from Citi, saying, "We are happy with the service received and do

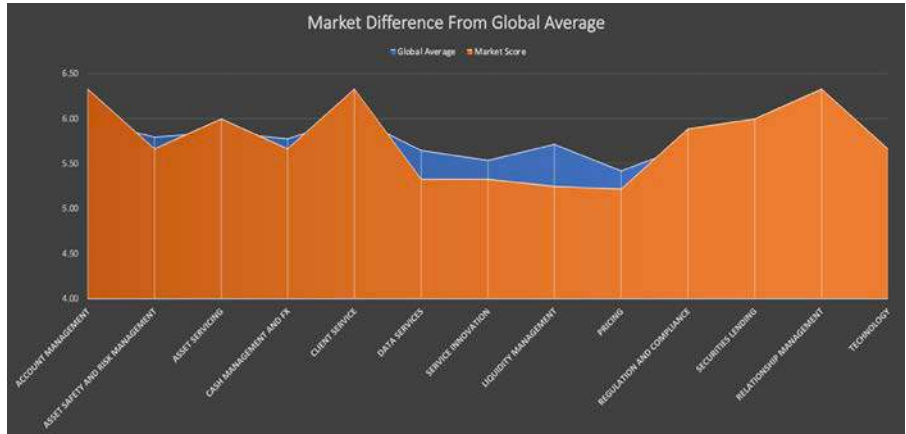
not expect to change custodian." It adds that the bank is proactive and quick to respond to queries.

Pakistan

As in 2021, responses were received from Citi, Deutsche Bank and Standard Chartered, though insufficient for individual ratings to be published. Overall scores are up on last year and above the global average in a majority of categories, most notably Account Management and Client Service.

Standard Chartered has again provided an indication of what it sees as the distinguishing features of its offering in Pakistan as the largest and oldest international bank in the country. “Pioneers in Islamic Banking, we were the first bank to receive an Islamic Banking licence and to open an Islamic Banking branch in the country,” says the bank.

“We strive to ensure superior client service with a team that is easily accessible, has extensive market and product knowledge and has strong exception handling skills,” it continues. “We have a strong interface with the local



market regulators, conveying foreign investor sentiment and ensure that we are a strong and reliable avenue for the regulators when seeking foreign investor feedback.”

Client comments for any of the pro-

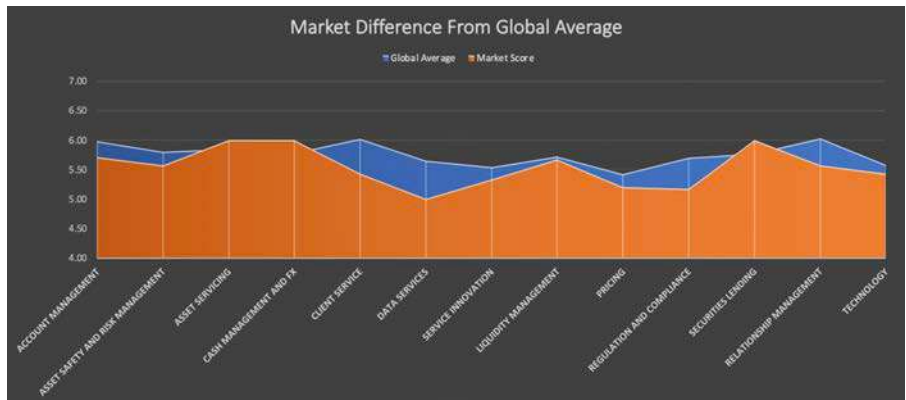
viders are few, though one Gulf institution praises the “very good service” it receives from Deutsche Bank.

UAE

First Abu Dhabi Bank, HSBC and Standard Chartered have all been rated for the UAE this year. Collectively, they have produced a set of results in the upper reaches of Good (5.00-5.99) for most categories, close to the global average, though surprisingly below that benchmark for Relationship Management and Client Service.

No comments are available to add colour to the scores apart from one regional client of Standard Chartered: “We have found the best team in UAE giving settlement services to us, always cooperative. Our new RM is a wonderful person.”

Standard Chartered claims the most extensive network among international banks in the UAE and more than 13 years of custody experience in the Emirates. It offers full end-to-end Islamic solutions, incorporating cash, custody, and fund



administration.

Recent developments it has implemented include “a single touch capability across all markets that we offer through the UAE hub; this enables us to

provide most efficient transactional cut offs which are similar to direct market cut-offs.”

Multi-market providers

There are several sub-custodians who are missing from the previous pages in markets where you might expect them to show up. These providers, all familiar names, may not have made the threshold in any particular market, but taking their responses in aggregate, they would qualify for a write up.

To give some indication of how they are viewed, we have included an indication of their performance overall. There are clearly holes in this approach as we are not necessarily comparing like with like, given that they are not active in the same markets. However, we felt that for those respondents who have taken the time to rate these providers, they deserve at least some feedback on how their own view of their providers tallies with broader opinion.

To mitigate against the distortions of the process, we have listed the markets covered for each provider in terms of responses received. We have also included any comments provided that may act as anecdotal evidence of the quality of service received.

In 2023, we will be looking at how we can get these providers over the line in sufficient numbers to feature in the individual markets where their services are offered.

Citi	Responses
Brazil	2
Chile	1
Colombia	1
Egypt	2
Greece	2
Hungary	1
India	2
Mexico	3
Pakistan	1
Peru	1
Poland	1
South Africa	1
Taiwan	1
Turkey	2
TOTAL	21

Deutsche Bank	Responses
India	13
Indonesia	2
Pakistan	2
Philippines	1
Taiwan	1
Turkey	6
TOTAL	25

HSBC	Responses
China	2
Colombia	1
Egypt	1
India	2
Indonesia	3
Korea	1
Kuwait	1
Malaysia	3
Peru	1
Philippines	2
Qatar	5
Saudi Arabia	4
South Africa	2
Taiwan	3
Thailand	1
United Arab Emirates	2
TOTAL	34

RBI	Responses
Czech Republic	3
Hungary	3
Poland	2
TOTAL	8

	Citi	Deutsche Bank	HSBC	RBI	Global Average
Account Management	5.00	6.54	5.07	5.40	5.98
Asset Safety and Risk Management	4.86	6.26	5.01	6.00	5.80
Asset Servicing	5.07	6.40	5.25	5.40	5.85
Cash Management and FX	4.82	6.26	5.15	6.00	5.78
Client Service	5.24	6.49	4.86	5.60	6.02
Data Services	4.80	6.06	4.99	5.80	5.65
Service Innovation	4.57	5.97	5.05	6.00	5.54
Liquidity Management	4.50	5.79	5.39	6.00	5.72
Pricing	4.43	6.05	4.71	4.20	5.42
Regulation and Compliance	4.79	6.21	5.03	5.33	5.70
Securities Lending	4.67	5.67	5.00	6.50	5.77
Relationship Management	5.41	6.46	4.89	5.60	6.03
Technology	4.57	5.56	5.26	7.00	5.58

Nordics (amended ABMM table)

Number of responses

118

With Denmark, Finland, Norway and Sweden all part of the Nasdaq European Exchanges ecosystem and one dominant sub-custody provider across these and the smaller Baltic markets, Global Custodian decided a few years ago to report one set of data for the largest four markets in the region. On that basis, the overall rating for the Nordic region is at the upper end of satisfactory.

However, this masks certain differences of appreciation by clients in the individual markets. Sweden records the highest score in the region for Relationship Management (5.71), while Norway tops the ranking for Account Management (5.43). Securities Lending is the lowest ranked category in each market with scores ranging from 4.41 to 4.62.

SEB

SEB records its best scores in Sweden, notably for Relationship Management (5.45), Account Management (5.42) and Client Service (5.39). Securities Lending in Finland and Denmark, followed by Data Services, are the categories showing most room for improvement.

Despite slight differences in the market category ratings, clients seem to be beginning to view the service provided by SEB as regional. One large European client, for example, repeats the same comment for Relationship Management in each market:

“Very knowledgeable and well-connected dedicated Relationship Manager. Understands our needs and informs pro-actively of upcoming changes and their potential impacts to the current set-up.”

In the Fall edition we included BNP Paribas. The scores were indeed awarded by their clients, but were for their global custody service rather than for on-the-ground sub-custody. While they still contribute to the market average they have been removed to avoid confusion.

Overall opinion	Percentage of responses
Excellent	6
Very Good	27
Good	14
Satisfactory	44
Weak	0
Very Weak	0
Poor	0
N/A	9



Category	SEB	Market Score	Global Average	Difference with Global Average
Account Management	5.05	5.29	5.45	-0.16
Asset Safety and Risk Management	4.94	5.12	5.33	-0.21
Asset Servicing	4.89	4.85	5.16	-0.31
Cash Management and FX	4.88	4.90	5.11	-0.21
Client Service	4.93	4.98	5.33	-0.35
Data Services	4.48	4.84	5.21	-0.37
Service Innovation	4.58	4.90	5.22	-0.32
Liquidity Management	4.76	4.73	5.12	-0.39
Pricing	4.90	4.74	4.90	-0.16
Regulation and Compliance	4.89	5.01	5.28	-0.27
Securities Lending	4.39	4.50	4.98	-0.48
Relationship Management	5.03	5.51	5.76	-0.25
Technology	4.83	4.91	5.15	-0.24
Average		4.94	5.23	-0.29