Best practices for Frontier and Emerging markets attracting foreign portfolio investment

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Executive Summary

The International Securities Services Association (ISSA) is a global association that supports the Securities Services industry. ISSA's members include central securities depositories (CSDs), custodians, technology companies and other firms who are actively involved in all aspects of the Securities Services value chain. By connecting its members and facilitating collaboration, ISSA provides the leadership necessary to drive change in the Securities Services industry. The focus is on finding progressive solutions to reduce risk and improve efficiency and effectiveness – from issuer through to investor – as well as on providing broader thought leadership to help shape the future of the industry.

This paper is targeted at helping and working with CSDs and local authorities attract more foreign portfolio investment and makes a series of observations and recommendations to that effect. The Working Group (WG) believes that it is beneficial for a country to open its market and to increase the diversified funding of its economy. However, attracting funding is difficult and becoming increasingly so due to several factors highlighted later in this report.

The WG recognises that changing a market is complex, time consuming and requires political will across the spectrum.

Leadership is required from all the stakeholders, but especially from the sovereign actors, the government and the civil service, since market change is an endeavour where the 'tail cannot shake the dog' owing to the range of elements needed to enable increased foreign portfolio investment and participation.

Success will come from the collective efforts of government (legal certainty, fiscal rules), the exchange(s) and trade intermediaries, the country's credit institutions, the CSDs and CSD participants, and from a change in external views, such as 'grey listing' from OFAC. These efforts, supported by investment professional associations and a series of effective public consultations, will combine to make a country's market more attractive to foreign portfolio investment.

This paper sets out each element needing to be addressed, some at a detailed level – such as potential account structures at the CSD – and some at a macro level – such as fully functioning laws protecting shareholder rights including minority shareholders. It does not shy away from some unpopular recommendations but explains why the conventional answers may not be in the best long-term interests of the market's development. The overwhelming view of the WG is that whilst these changes are aimed at attracting foreign investment, they will be equally beneficial to domestic investors, at both a retail and institutional level. This diversification of the investor base will support the overall liquidity and functioning of the market.

For the paper the key elements to be addressed are those from the viewpoint of foreign investors, such as foreign exchange, local funding liquidity, credit risk, repatriation of funds, and treatment of minority shareholders. These may not be as significant to local domestic investors looking at the market in isolation, but market liquidity remains a key determinant of price discovery and foreign portfolio investors will help to provide this liquidity and benefit all participants.

In conclusion, the WG has sought to highlight the most important elements of opening up a market to attract foreign portfolio investors. However, it should be expected that, in practise and on a case-by-case basis, elements will arise which have not previously been foreseen.

The WG is available to discuss these issues if requested and would appreciate feedback on this paper to improve future editions.

Report Objectives

The primary objective of this report is to enable frontier and emerging markets to understand the scope and challenges of attracting more foreign portfolio investor capital. By highlighting the areas which require change – some of which are outside the control of the CSD or the capital markets infrastructures – ISSA hopes to encourage and guide the discussions that will be needed in attracting portfolio investors to such markets.

This report is not intended to serve as a blueprint covering every aspect of market change required, but rather to highlight the areas where most focus is required.

Target Audience

This report is primarily aimed at frontier and emerging market Securities Services participants (hereafter collectively referred to as 'emerging markets'), their regulators and their governments. However, the report should also appeal to foreign portfolio investors looking to assess the risks of investing in emerging markets.

Working Group Participation/ISSA Reviews and Approval

The terms of reference and the approach taken were approved by the ISSA Operating Committee prior to the WG's initiation, namely:

- The WG comprised the members of the Domestic CSD Working Group, who were all ISSA members
- Inputs and insights were sought from other external parties. However, in line with ISSA practices, the report was reviewed and approved by the ISSA membership only, and no external party's approval was sought when publishing this report

This report was approved by the ISSA Board and the ISSA Operating Committee prior to publication.

Acknowledgements

This report is the result of efforts by a team of experts drawn from ISSA who participated in the Domestic CSD Working Group. This included Operating Committee members and other ISSA member firms. The names of the firms who participated in creating this report along with the individual contributors are provided in Appendix A. The ISSA Executive Board wishes to thank the WG members for their contributions as well as their firms for having enabled their participation.

1 Background

The WG created this document as a resource for any market wishing to attract increased foreign investment from institutional portfolio investors. The scope of these discussions along with any recommendations made are limited to the areas requiring focus in order to increase the attractiveness of emerging markets to foreign portfolio investors. Although different countries will be at different stages and on different paths, the WG has a common view on what must be achieved in order to increase foreign investment. Regardless of their developmental status, emerging capital markets can be attractive portfolio investment destinations for funds seeking diversification[1]. However, it is worth highlighting that they do require that sufficient market depth and breadth of product offerings exists in order for foreign portfolio investors to participate meaningfully.

At the start of the WG, it was agreed that the paper should focus on how to attract foreign portfolio investment funds to emerging economies. The rationale for this was that the introduction of such funds would be extremely beneficial in growing emerging market economies and driving their long-term capital market development. It was also recognized that if the structural, legal, regulatory and operational aspects of capital markets were consistently upgraded – in line with the recommendations and themes discussed in this report – then the benefits of improved governance, robust regulatory regimes, market transparency and investor protection would accrue to foreign, domestic, institutional and retail portfolio investors alike. Moreover, domestic investors in these economies would also benefit from market education and other progressive changes not addressed in this paper.

The paper is targeted at helping the CSDs and local authorities from emerging countries attract more investment and makes a series of observations and recommendations to that effect. The WG believes that it is beneficial for emerging countries to open up their markets and increase the funding of their economies in the process. However, attracting such funding has been historically difficult and is likely to become increasingly so going forwards.

In addition to the measures that emerging countries must undertake to increase investment, there are several countervailing forces that investment managers and asset owners (collectively referred to as 'institutional investors' hereafter) must overcome before investing in such markets. Many of these forces are not within the domestic markets' ability to influence and include:

- Increasing pressure on the fees and margins of institutional investors – especially since passive funds track benchmarks which rarely include emerging markets
- Rising regulatory compliance and transparency burdens in their own market
- Geopolitical tensions and the increased use of sanctions
- The replacement of legacy technology with new technology

All these challenges are capable of being addressed and contextually a domestic market should understand that the higher the 'pull' factor for investment, the more likely it is that there will be a 'push' from the institutional investors to invest.

[1] FR09/2020 Development of Emerging capital markets: Opportunities, Challenges and Solutions (iosco.org)

It was also acknowledged that domestic CSDs, acting alone, do not have the influence to deliver more attractive capital markets. The task of increasing the ability of a market to compete for foreign portfolio investment flows requires a coordinated effort at country level, involving national government departments, regulatory authorities, capital market infrastructures and pre- and post-trade investment intermediaries. To ensure success, there needs to be an alignment of objectives of – amongst others – the national competent authorities (including the central bank), the exchange(s), CSDs and credit institutions. This includes the formulation of a clear definition and endorsement – at national level – of the targeted structural, legal, regulatory and operational profile of the capital market and the elaboration of changes which will be needed to transition the market to that future state. This national plan is key to the success of this transformation.

The WG recommends that the development of a national plan should involve the following interest groups:

- Government (legal certainty, fiscal rules)
- Exchanges and trade intermediaries
- External views such as 'grey listing' from OFAC
- Credit institutions
- Depositories and depository participants
- Investment professional associations
- Effective public consultation

Also, any national plan should – as a minimum – ensure that all parties reach agreement on the required regulatory, structural and technical changes. As always, there will be winners and losers, but the benefits of increasing investment in the markets should create a net win for the economy.

2 Role of Market Stakeholders in creating a National Plan

The scope of the involvement of the stakeholders listed in the previous chapter is detailed below.

2.1 Government

Government involvement will take place via the ministry responsible for financial sector policymaking, regulation and for policies that seek to manage the long-term flow of capital between countries. This is most likely to be the Ministry of Finance. With these objectives in mind, the ministry will at least need to be involved in the introduction of new laws and any secondary legislation required to make the market more attractive to foreign portfolio investors, namely:

a. **New laws** may be required such as Know Your Client (KYC), anti-money laundering and anti-terrorist financing legislation[2]

b. **Secondary legislation and regulations**

c. **The treatment of minority shareholders:** in many emerging markets, domestic institutional investors hold significant local shareholdings in the biggest firms, therefore protecting the rights of minority shareholders is an important legal reform. Investors need to understand that their rights are protected and that major (local) shareholders will not be able to lobby and adversely change the outcomes for foreign investors. Fair and non-prejudicial treatment of minority shareholders includes rules and legislation to protect their voting rights and access to the shareholders' meetings, either via proxies or in person

d. **Agreement on account structures:** omnibus, segregated, nominee[3], or possibly all. It should be recognized that any requirement for individual segregated accounts may hinder inflows (see below)

In addition to the participation of the Ministry of Finance, there may also be a requirement to involve the Foreign Ministry, since once the enabling legislation and regulation have been put in place, there may also need to be a bilateral accord between the home country and the investor base country; for example, an accord exists between the US and Nigerian regulators to recognize equivalence.

The paper includes examples – both positive and negative – of changes that have either attracted or repelled flows of funds.

2.2 Exchanges and Trade Intermediaries

Exchanges and trade intermediaries must review their rule books and ensure that they are non-discriminatory to foreign firms. This includes ensuring that there is liquidity in the market and that activities such as front running do not occur. The trade intermediaries need to be suitably capitalised, offer best execution services and ensure that a suitable array of order types can be supported.

2.3 External views such as 'grey listing' from OFAC

The best laid plans can be derailed by external assessments from bodies such as the Office of Foreign Assets Control (OFAC). The appropriate assessment can be helped by government action (see above), but there may be a difference between the legal framework and what happens in practise on the ground. AML and CTF (Counter Terrorist Financing)

[2] Guidelines to Emerging Market Regulators Regarding Requirements for Minimum Entry and Continuous Risk-Based Supervision of Market Intermediaries (iosco.org)

[3] Regulation of Nominee Accounts in Emerging Markets (iosco.org)

regulations must be enforced – as well as passed – at government level, which requires coordinated efforts between the government, police or anti-graft units, and the courts.

2.4 Credit institutions

Foreign investors will need access to the local currency. This can either be achieved through the foreign exchange market or – more likely – through holding accounts at local credit institutions, be they banks, brokers, or possibly the CSD. Many investors prefer to retain cash holdings, either held at a central bank or in a bankruptcy remote manner in order to mitigate the risk from possible credit institution failure. If not possible a commercial bank can offer an alternative. The local credit institutions need to work with the government and the central bank to design a banking system to facilitate this.

2.5 Depositories and depository participants

The organisation, governance and risk management of the CSD is key to any foreign investment. The CSD and its participants need to ensure that – at a minimum – the rules and regulations match the Principles for Financial Market Infrastructure (PMFI)[4]. standards. Where it is not possible to meet these standards, the CSD should clearly articulate why not and should highlight any mitigating factors.

- It should be noted that a Security Settlement System (SSS) is an infrastructure and/or system and does not extend credit
- A CSD can operate the SSS, or the SSS can be managed by another party
- A CSD is likely to operate and govern more than just an SSS, including such mechanisms as the share registry, transfer agency services, etc.
- CSDs can offer credit, but often do not
- If a CSD does provide credit, then the WG believes that the risk management and rules need to be different

There may be other market participants who do offer credit, such as banks etc., and credit provision is discussed later in the paper.

Throughout this paper, we use the term CSD to denote the SSS and ancillary services.

2.6 Investment Association and Public consultations

The changes are societal and must be made with both the understanding of the public and with input from the expertise of the investment professionals. However, without the support of these two elements, a sub-optimal outcome is likely. The Investment Associations should work to maximize the benefits to the country and not just for their members, since any efforts should be focused on increasing the size of the overall market opportunity and profitability and not protecting individual franchises.

3 Encouraging Foreign Investment: what works and what does not?

The challenge of opening up a market to foreign investment is complex. As noted in Section 1 'Background', the entire country must be willing to open itself up to foreign investment, although this may not always be the case when political beliefs or a particular financial situation allow the country to finance its own growth. The ISSA makes no judgement on

[4] Principles for financial market infrastructures (bis.org)

the need to open up a market to foreign investors but highlights several attributes which a country needs to consider if it is to be regarded as attractive to foreign funds.

Investment may either flow directly from the investor or via an investment intermediary such as a global custodian. The global custodian may either employ a local custodian, or – if allowed and commercially sensible – have a direct relationship with the CSD.

In selecting a target investment market, considerations for investors and intermediaries include:

- Market and regulatory environment[5]
- Fiscal rules and double tax treaties, tax reclaims regime
- Anti-Money Laundering (AML) & Know Your Customer (KYC)
- Access to markets and banking services
- Functioning FX market allowing FX Convertibility
- Exchange Rules and Transparency
- Central Counter Party/Clearing House (CCP)
- Central Securities Depository (CSD)

3.1 Market and Regulatory Environment

Investors will conduct a detailed and thorough analysis of the existing regulatory framework prior to investing. An important element in attracting foreign investors is that there should be an absence – or only selective incidences – of foreign ownership restrictions. Where there are restrictions, these should be transparent and, preferably, stable.

It is critical that there are no objections, significant restrictions, or penalties applied to the investment of capital, nor to the repatriation of capital and income. These restrictions can be explicit, such as money needing to be invested for a ten-year period. Equally, these restrictions can be implicit and enacted through either penal tax rates or via a government-approved foreign exchange rate which is not aligned to a market rate for the currency, or involving onerous approval processes.

There is a need for a 'level playing field' within the market. To be attractive to institutional investors, a market must be seen as transparent and well-governed. To that end, the WG recommends that there are formal securities market regulatory authorities who actively monitor the market(s). These can be either a standalone financial market authority/authorities, or a department within the central bank charged with enforcing market transparency and governance.

Within the market, there not only needs to be robust market governance, but also sufficient competition between the brokers to ensure high-quality brokerage services. This does not only mean excellent execution – no front running, etc. – but also sufficient capitalisation of brokers within the market context. In addition to high-quality brokerage services, there also needs to be transparency of information regarding their licensing/authorization process, an applicable legal framework, and protection from fraud or other malfeasance.

Good corporate governance, of both the market and the individual firms listed on the market, is a feature demanded by investors. There are several existing corporate governance guides in existence – this paper does not intend to replicate

[5] Some of the rules and those applicable by FTSE Russell https://www.lseg.com/content/dam/ftse-russell/en_us/documents/country-classification/ftse-country-classification-update-march-2023.pdf

these guides but rather to reiterate the point that better corporate governance serves to increase foreign investment into an economy.

Investors also look at the stability of the legal framework with laws being consistently and reliably applied and enforced; for example, are the market rules subject to sudden change and/or retrospective changes which might adversely affect a market's attractiveness? If a market has had a well-functioning legal structure for decades which is then changed by a new government, this will affect the flow of funds. Therefore, if a country is looking to change the rules within a market, there should be an open consultation with the investor community.

There also needs to be clarity regarding the 'owner' of a rule. If several market regulators are active in a market, who actually owns a specific rule and who can be educated about its impact?

The WG acknowledges that where central banks conduct any CSD activities and operate CSD systems, they may or may not be required to be licensed and supervised by the capital markets regulator. Where a central bank is not required to obtain a license, the WG recommends that it aligns its CSD operations and systems with those of licensed CSDs in at least in the following ways:

- Publish the operational and business rules of the central bank depository
- Implement robust industry consultation procedures for any amendments to operational and business rules. Market standardization on this matter is invaluable
- Not changing CSD systems without industry consultation and carefully managing the impact of any change if it would impact on the operation or application of business rules relating to CSD activities
- Following the CPMI–IOSCO Principles for Market Infrastructures (PMFI)[6]

3.2 Fiscal rules, Double Tax Treaties and Tax Reclaims Regime

Tax is obviously a sovereign discussion, and countries will have their own fiscal priorities, but transparency is key. Elements which should be fair, transparent and equitable across domestic and foreign investors include:

- Capital Gains
- Stamp duties
- Transaction taxes
- Withholding taxes
- Repatriation of profits, particularly in respect of:
  - the foreign parent and local subsidiaries
  - the investors for their trading profit

The rules of tax application and applicable tax rates should be available in both the local language and English. Taxes and tax procedures should be applied consistently and fairly to allow foreign investors to have confidence in the legal environment, although this may be hard to demonstrate to the first wave of external investors.

Consideration must also be given to currency and exchange (rate) controls, particularly as they will impact the methodology by which foreign investors repatriate capital. These should enable the easy transfer of cash between all market parties and the ability to repatriate profits.

It is the WG's view that there should be no legal or fiscal restrictions regarding an investor's strategy; i.e., if the fund wants to change its allocation between market sectors – say, out of Industrials and into Consumers – then it should be able to execute that reallocation without any restrictions. The level of convenience when wishing to execute such

[6] Principles for financial market infrastructures (bis.org)

strategies should also be a consideration; for example, for certain types of investments in China, the Qualified Foreign Institutional Investor (QFII) programme mandates that an investor is required to update their investment strategies through filings with regulator, which can take some time to process.

The absence of these constraints should equally apply to a fund's entry or exit from a market. An example of good access to a market is Nigeria, where there are low administrative hurdles so the registration and import of funds is easy and can be executed using automated tools such as SWIFT messages. By contrast, the use of the Tax Identification Number (TIN) that is required in Kenya in order to benefit from double taxation treaties involves a cumbersome application process for all bank account holders without exception. Foreign portfolio investors and foreign intermediaries with no on-going tax liabilities in Kenya are required to apply for either the TIN or make a similarly detailed application for a TIN exemption The time for TIN or TIN exemption application processing is not prescribed in tax administration rules and in practice the process can be protracted. A good process is one which permits automation, and the exceptions should be able to follow a known path with certainty on timing.

One approach to solving the administrative burden associated with accessing double taxation treaty benefits can be seen in the European Union's *Faster and Safer Relief of Excess Withholding Tax Directive*[7]. The opening paragraphs of the proposal articulate the problem in the European context, although it applies equally across all geographies:

"In the EU, investors may be generally obliged to pay tax twice on the income they receive from holding securities (namely dividends on holdings of equities and interest on holdings of bonds) in a cross-border context.

- *First, taxes may be levied in the country of the issuer of the securities (the source country) in the form of a tax withheld from the gross securities income, (withholding tax 'WHT')*
- *Secondly, taxes may be levied in the investor's country of residence (the residence country) in the form of income tax*

To avoid this double taxation, many countries have agreed to share taxing rights between the source and residence countries by signing double tax treaties (DTTs). Under the terms of these treaties, non-resident investors may be entitled to a lower rate of WHT or to an exemption in the source country. Besides tax treaties, some source countries have introduced rules that provide for lower rates or exemptions for specific non-resident taxpayers with specific policy objectives in mind."

It then explains both the issues – with a retail focus on the complexity and unlikelihood of reclaiming the withheld taxes – and the prevention of dividend arbitrage to the advantage of the fiscal authorities.

A solution – which the WG supports – would be for markets to establish mechanisms for mutual acceptance of tax residence certificates. This recognition should be as they are issued by tax authorities (preferably in a machine-readable form in the worst case a physical form). Additionally, there should be standardized reporting, and a 'Quick Refund System'. This should be implemented with specified timescales and applied for all investors that submit verified tax residence certificates in the mutual acceptance programme. This approach would maintain the privacy of data, allow for greater automation and be interoperable across multiple jurisdictions. The proposed approach leverages reliance on conventions and agreements for the exchange of information and mutual administrative assistance that are common between and among governments. The WG understands that this system may only be

[7] EUR-Lex - 52023PC0324 - EN - EUR-Lex (europa.eu)

applicable for a highly integrated Economic Union and that it has yet to be implemented, but – once put in place – this approach could pave the way for other countries to follow suit.

3.3 Anti-Money Laundering (AML) & Know Your Customer (KYC)

Some emerging markets – perhaps unfairly – have a reputation for money laundering and corruption. While this might be unjust, the legal and market framework must have strong AML, anti-bribery and corruption laws in place.

Furthermore, institutions will require strong AML rules and legal provisions. There are many best practices which can be implemented to assist a country and its institutions in the implementation of sound governance, including – but not limited to – the Wolfsberg and ISSA due diligence questionnaires. The WG recommends that the local CSD(s) subscribe to the SWIFT Registry to provide visibility for the information on the CSDs, which should include the financials, registrations, AML policies and rules.

KYC regulations are also key. These are considered more efficient where they are aligned to international norms, with additional local requirements serving to potentially reduce inflows. Where a single access point/register can be created, this would be considered a benefit, although whether this register would be for institutional or individual investors only would remain a decision for the government. Note that, in general, institutional investors and investment intermediaries are usually accountable institutions for the purposes of AML and KYC in their home jurisdictions and as such have lower risk profiles. A single KYC platform would also benefit the market as a whole – i.e., for investors as well as for the authorities and service providers since parties requiring information on the investors – in other words, the custodians and the tax authorities – could access all the necessary 'golden source' information through the same platform.

There should also be appropriate operational measures for screening transactions and managing risk across the front-to-back system. For example, in Zimbabwe, the AML transaction screening at market/exchange level is not as stringent as at bank/custodian level, so trades can be executed and then subsequently fail to pass screening for settlement. In order to ensure orderly, safe and predictable markets regulators must enforce uniform standards.

At an early stage, the country should assess the approach and requirements for disclosure of the Ultimate Assets Beneficial Owner (UABO). Depending on the decision taken by the government, the implications will flow through the securities value chain and need to be reflected throughout its lifecycle, including in respect of the CSD and its participants. For example, when Botswana was initially put on the grey list, it reacted strongly to have that decision reversed. However, the regulations Botswana imposed were stringent and took no account of whether the KYC process had been already performed at a global custodian level on the UABO. Ultimately through lobbying efforts of local providers, the Botswanan regulators reviewed the UABO framework to provide better guidance notes that took into consideration sector specific nuances including global financial intermediaries and collective investment schemes. The WG recommends that there needs to be consideration given as to how the investors are previously vetted in the value chain as well as the contractual provisions of that value chain. This approach aligns fully to the utilization of ISSA's Financial Crime Compliance Principles to reduce risk while making the market more efficient.

Within this contractual structure for information flow between the UABO, the intermediaries and the CSD a country may wish to consider whether it also imposes a requirement for an issuer to ask for the disclosure of its UABOs in certain circumstances. The WG does not have a definitive opinion on best practices in this regard. However, if this requirement is promulgated, then the rules and processes also need to be set up so that the issuer can follow the intermediary chain to the UABO.

There should also be clarity for the accountability regarding sanctions procedures. This is generally not an issue within a country but becomes more contentious when the host nation has sanctioned an entity which indirectly accesses the market via intermediaries. These elements of the value chain need to understand the sanctions and their implications whilst abiding by the local rules.

The WG believes that the notarisation/consular/apostille approaches do not improve the control of the KYC risks, nor do they improve the process. A singular authority should preferably be given the responsibility to govern the onboarding investors. Where this is deemed impossible, the WG suggests that the legal constraints should be removed, since the historic rationale has been superseded by technology and process.

This view is echoed by the work here that has been undertaken by the index providers, i.e., FTSE and MSCI in the 'Quality of Market Assessment' for the stock exchanges. One of the elements that they consider is where a market requires notarization/ consularization of documents for depository account opening together with periodic resubmission of the documentation as part of account opening. The index providers will consider the market to be one that is restricted for entry if periodic resubmission of legalised documents is annual.

Apostille that requires each issuer to get a certificate of residence to pay out the dividend annually is a particularly onerous and inefficient process. The WG would again point out the opportunity that can be seized by adoption of something similar to the EU's Faster and Safer Relief of Excess Withholding Tax Directive. The establishment of a central authority and all listed firms could subscribe to the service if such a requirement is considered necessary.

If a market wishes to welcome foreign investors, then the more harmonized to global, legal, regulatory and operational standards it is, the easier it will be for foreign investors to invest in that market. However, it was noted in the ISSA's Digital Identity and Onboarding WG, that these global standards are not quite as 'standard' as the WG would like.

It was suggested that the establishment and use of a validated and harmonized investor number would be useful when an investor seeks to gain access to a market or group of markets. In some markets, this happens via the Financial Market Infrastructure (FMI) which issues the numbers and there can be subsets of this number; for example, an investor's account with Custodian Bank A might be CBAXCP12345, but the investor's account with Custodian Bank B could be CBBY16785CP. However, both are unique and linked to the investor's account at the FMI, which is FMICP111222. There is a harmonized account numbering system in the West African Monetary Union (WAMU) region that already works along the lines of what is being suggested here. In this case, the way the reference number is structured helps to identify whether it is a foreign investor or a custody account and provides a basis for further enrichment of the underlying investor data and making it available for reference in all post trades processes and approvals. It was also suggested that numbering agencies or FMIs could learn from the processes that the Association of National Numbering Agencies (ANNA) uses to issue International Securities Identification Numbers (ISINs), or the Global Legal Entity Identifiers Foundation (GLEIF) uses for Legal Entity Identifiers (LEIs).

3.4 Access to Markets and Banking Services

<u>Investor registration numbers</u>

Countries have differing motivations for attracting foreign portfolio investors to their markets. As such, market access rules reflect the varying degrees of control that each country seeks to impose on the level and nature of foreign portfolio investor participation in their capital markets. Markets where local investor capacity or state ownership and control of key business sectors, are high may implement measures that control market entry and allow enhanced monitoring and control of the activities of foreign portfolio investors.

These measures may include stringent KYC and documentation requirements, issuance of investor registration and identification numbers, as well as various types of investment limits for foreign investors. Foreign investor limits are discussed in sections 3.1 and 3.2.

Where countries use unique investor identifiers as part of authorising and regulating access to capital markets international investors prefer either a simple registration process, or none at all. They are less likely to invest capital if only original documents (legalized and translated) are accepted or if apostille documents with original signatures are required in the process of registration. This is not to say that these can never be required, but making them mandatory in all cases adds an element of friction to the investment process. If there is a registration process set-up, it is vital that the process is transparent so that an investor knows exactly where it sits within that authorization process, along with open and frequent communication of the application status and a clear articulation of what is needed at any stage in the process.

Further to the registration process itself is the criteria for continued access to services – is there an ongoing requirement placed on the investor to prove that they still meet the criteria on a regular basis?

Once an investor has access to a market, then local currency (as well as stock) liquidity is key – who provides it and how?

Bank account opening – KYC requirements

Depending upon the market structure, international investor participation in the local banking system is typically via the sub-custodian or the global custodian acting on behalf of the international investor. The CSD participant may have an account at the central bank, which may or may not offer accounts within the Real-Time Gross Payments System (RTGS), or at a commercial bank operating in the locale.

For a global custodian, the rules for accessing the banking system may prove onerous if extensive documentation including copies of photo identification and sensitive personal information is required in respect of every underlying client in order to open omnibus bank accounts. The process would be and even more daunting if the bank accounts need to be segregated and opened for the beneficial owner. This can be a significant issue for investors, although it is solvable in the majority of cases. The issue arises if the documentation required relates to individuals and is sensitive, high risk and the volume of documentation exchange is significant. At this point, there emerges a noticeable trade-off between the desire of the local country to ensure that they can identify and verify the beneficial owner and the source of the funds, and the data protection laws in the foreign investor's home jurisdiction. These concerns are particularly acute where the individual's privacy may be compromised and there are anecdotal stories about lax privacy and data protection controls in respect of photo IDs – for example, passports – in emerging market countries. These stories may not be true but do, nonetheless, deter investors from other jurisdictions based on perceptions.

Local market structures may create a perception of higher risk. For example, if multiple CSDs and/or CCPs, and the payment system are all demanding documentation, then it is more likely that this will act as a deterrent to investors. Where a country requires investor IDs, allowing the investor to use the same investor ID at all of the country's infrastructures is one way that this challenge could potentially be overcome.

In some emerging markets, the requirements are set high for personal data. In Nigeria for example, biometric data – such as fingerprints of key personnel – is required for bank account opening and it is difficult for non-residents to access the payments system directly. It is therefore a more complex decision for investors to balance the benefits of ownership versus the needs of the investor and the knowledge of the intermediary.

Bank account opening – Choice of account

In respect to banking, there are essentially three choices for any investor when investing:

1. Direct with the Global Custodian (GC)
2. To use a correspondent/commercial bank; or,
3. In limited circumstances a central bank account

The decision as to which level an account is held at is based upon the sophistication of the investor and the investor's own risk parameters (see section 3.10 further below). Investors can access foreign securities markets directly, but many prefer to take on the credit risk of a global custodian and outsource the relationship with the emerging market to them for various risk considerations. Where investors qualify to access the local payment system directly and open RTGS accounts they may take this option but, the lack of bankruptcy remoteness for RTGS accounts in some markets creates hard constraints for the investors.

The level of sophistication displayed by both the underlying investor and the invested market will impact upon the choices that the investor feels optimises its outcome. Attributes that need to be considered include the volume and value of trades within that market, the markets' ability to use SWIFT, APIs and give near instant instructions within the market, the ability to microprocess transactions, and the appropriate capitalization of the intermediaries along the value chain.

It may not be, and in many countries it is not, possible for foreign investors to access a central bank account, but where it is possible, the investor should retain the right to select which method they wish to use to access the payments system. Whichever method is used, the practical implications of the investor's choice need to be clearly documented. For example, the investor's identity is important element of account reference data but if disclosing this level of information is not desirable for an investor then they may choose a different solution. For instance, a custodian in the market may offer an omnibus account structure which is likely to have less onerous documentation requirements than a central bank account.

In some countries the government is de facto the CSD for government bonds, therefore an investor may need access to a central bank cash account in order to trade in government bonds.

In addition to credit risk, investors will need to manage liquidity. Liquidity risk is a particularly pertinent when the currency is either restricted or not actively traded.

There are several options which may help solve this problem.

It is more likely that smaller domestic CSD will only settle in the local currency, but a multi-currency settlement option could possibly resolve the lack of local currency hedging and increase market liquidity. This would mean that the CSD would need to be set up to allow settlement in either the local currency or a more liquid currency, such as the US dollar, the Euro, or Japanese Yen. However, multi-currency settlement options introduce different risks that require management and the concept of allowing multi-currency settlement may be at odds with the reasons that the currency has been restricted in the first place. This can be supported by the central bank offering local currency swap services to help manage the risks in the case of a default at the CSD.

Cash liquidity can be offered either by the CSD providing credit or by the banking system participants. If the CSD does provide credit, then the risk management and rules need to be different compared to if it does not. Banking system participants generally have the appropriate controls in place for lending, but international investors may not accept the credit risk they will retain with the banking participants unless they are well capitalised.

CSDs do not operate in isolation and need to consider what services they offer and what is available elsewhere in the market. If liquidity issues are not resolved, then it is hard to attract investment. One of the options that CSDs can consider is offering collateral management services. If offered by the CSD these may also offer a route to opening the market and reducing the issues of the lack of an actively traded FX market.

Within the Principles for Financial Market Infrastructures report[8] issued by the bank for International Settlements, Principle 9 (page 67), explores further the options for the cash settlement leg of a transaction. It highlights the benefits and challenges of each method and the possible risk mitigation that can be applied. The WG would recommend that the FMI's in a market read and digest the implications of each methodology and make their decision based on the market conditions. It is likely that the flows from foreign investors will be maximized if the SSS interoperates with the CB in real time and the balances are held there. This topic is further examined in section 3.10.

3.5 FX Convertibility

The ability to convert from one currency to another is another aspect of the access to the payment system that significantly impacts investor's decision to participate in a country's capital markets. If the local currency has convertibility constraints – such as x% of the available foreign reserves being used to pay for food or oil – or is simply not convertible, then this imposes costs on the investor. These costs are a combination of the FX spread on the bid and offer and a liquidity cost, which could be significant if the intended repatriation is large in comparison to daily flows for priority imports.

The WG recommends that the relevant government implements a well-regulated FX market with as few restrictions as possible on the flow of funds. It is recognized that this is a sovereign decision, but for foreign capital flows, the less restrictions the better. The adoption of the FX Markets Global Code by the country in question would be beneficial.

If the country implements restrictions, these should remain as static as possible in order to avoid confusion. Any restrictions should also be clear; i.e., balance of payment regulations, country level reserves of FX, and prioritization rules for repatriation such as FX allocation and FX pricing should all be transparent and consistently applied by market operators and enforced by the courts

Institutional investors need to be able to easily access market information on any restrictions which might apply to inflows and outflows of investment funds into the market including without limitation:

- Fiscal rules; i.e., a tax or government decree to reduce currency exchange or outflows?
- Convertibility rate risk; i.e., the conversion rate is not the 'market' rate but a set rate by the government?
- Protracted processes for the issuance of tax certificates without which money cannot be withdrawn?

Access is required to the FX markets via the central bank or well-regulated, properly supervised, creditworthy local intermediaries.

3.6 Exchange Rules, Transparency and Fees

It is often the case that a country's capital market is dominated by local – and naturally smaller – brokers. Some of these brokers may view market change as a threat and resist the changes required for processes, such as best execution. The local brokers' concerns require management, and it is key to educate them on the possible benefits of a deeper and more liquid market.

[8] Principles for Financial Market Infrastructures

A number of these brokers may be thinly capitalized and concerned about investing in market developments given that it might affect their financial viability. For example, there were seventy-five brokers in Romania before the opening of the market and now there are only thirty-four. The threat of change is not an irrational concern, and the local brokers are powerful voices in capital market. However, sub-optimal capitalization of brokers has led to poor outcomes in various markets, namely:

- Shifting of brokers' risk to custodian banks
- Inflexible settlement models e.g. in Tanzania the process of clearing trades for settlements is specifically designed to compensate for the low level of broker capitalisation in the market
- Slow adoption of technology e.g. limited adoption of SWIFT in Kenya
- Increased market participation costs e.g. comparatively high penalty levels in Botswana and Kenya

Foreign investors demand a range of brokerage offerings to satisfy the required liquidity, speed, and order execution policies. These offerings are likely to vary by market based on of each market’s depth and liquidity, as well the service profile of local brokers. However, as each market develops, the brokerage services offered and speed and quality of execution will need to mature.

The communication between local broker, CSD, local custodian and investor – as well as the investor’s global custodian – will need to work well and should preferably take place in a machine-readable digitalized format and in real-time. The market should seek to ensure that a minimum standard is in place for the digitized transference of data between all parties in the chain. The WG does not recommend a particular protocol but rather recommends the principle of instantaneous – or at least near-instantaneous – interfaces between market infrastructures to transfer of data in a digital form. Where possible, all corporate events should also be announced in a standardized digital form.

Transparency and reporting requirements. As a minimum, the exchange should offer next-day reporting of trades and prices. This should tend towards real-time as the market matures.

There is a contested principle that short selling helps price discovery and hence makes markets more efficient. Investors from large investment firms often lend out stocks to boost the returns of the funds that they manage, believing that their fundamental analysis has correctly priced the asset. On balance, allowing short selling – but not naked short selling – in a market is more likely to be regarded favourably by investors. That is not to say that if a market rejects short selling it will fail to see improved capital flows, but rather that by introducing a well-regulated short selling regime, an additional disincentive to invest in a market would be removed.

Exchanges should consider the pricing methodologies they use. For example, in Ghana, the quoted price for listed securities only changes if a minimum volume threshold is crossed. This means that the quoted prices of some stocks are outdated, and consequently foreign investors are not able to include those securities in their portfolios.

Regulatory fees, levies and exchange fees should be transparent to the end clients’ representatives and noted on the broker/contract notes. Fees are often set in ranges – for example, X–Y transactions cost USD 0.04 and Y–Z transactions cost USD 0.035 – which may create some complexity within the fee schedules and consequently require negotiation by the local brokers and investors. The model for market fees can in conjunction with other market conditions have the unintended consequence of fee discouraging market activity as observed in Kuwait where the current fee model is sensitive to volume and liquidity fluctuations in ways that may make the market less competitive than other markets in the region. Fees are usually passed onto the investors as out-of-pocket expenses. However, they are – by their nature – challenging to agree, as each entity seeks to optimise returns. There are many variations in fees with the simplest being a fixed tariff, but others are dependent on different parameters which can make cross-market comparisons exceptionally difficult.

3.7 Central Counter Party/Clearing House

It is unlikely that a CCP will be required at the outset of a frontier markets moving to EM, since the volume will not be present at the start of the journey, although foreign investors may be reluctant to accept the risk of dealing with smaller capitalized brokers. This can potentially be addressed by changing the flows and processes so that the risk is held by the custodians or other more capitalized parts of the ecosystem if those parties are willing to intermediate in that market.

The creation and running of a CCP is expensive, using a large amount of capital both within the CCP as well as by its members. This is especially so where the risk mitigation for the market is achieved by novation of the trades to the CCP. Principle 5 and Principle 7[9] of the PFMI state that CCP funds should be able to cover the simultaneous loss of the two biggest market participants.

There are other options that may provide the same – or similar – risk mitigation. These include guarantee funds, variable contributions based on technical parameters – including positions and value – and buy-in and sell-out procedures within the rule book.

The other alternative to a full CCP infrastructure that should not be overlooked is the option to shorten the settlement cycle; for example, T-zero requires significantly less resource in a CCP structure than T+5. Selecting the optimal settlement period to balance all the requirements (including, but not limited to, currency funding and liquidity) is required. (See further below in Section 3.10 CSD mechanics – Settlement)

If a CCP is created, then there are several aspects that need to be considered. These include, but are not limited to:

1. **Access**: who does the CCP admit as members – only local firms or a combination of local and international ones? Also, in what capacity – Direct Clearing Members or Indirect Clearing Members? Is the process for admitting new members based on trading volume or balance sheet capacity?
2. **Rules**: these can be viewed at two levels: macro – such as the netting and margin algorithms – and micro – such as what is the exact time that a trade novates to the CCP, what is in the net and what is outside?
3. **Default funds**: how are these set up, maintained and grown over time? The design of a CCP default fund waterfall – i.e., the order in which resources are called, such as margin, default fund, CCP's own capital etc. in a default situation – is a complex task, especially if the CCP is not initially profitable.
4. **Product coverage**: what products will be covered. Not all products require a CCP, and markets should consider appropriate solutions, such as those seen in cross-currency repurchase transactions in China. Here, the CSD facilitates settlement through a managed 'Payment after Delivery' (PAD) and 'Delivery after Payment' (DAP) mechanism, so that the risk can be managed at a clearly defined level. The market is also working towards DVP settlement for this product at a later date. This is an example of a market evolving regarding specific products and finding cost-effective solutions.

In the view of the WG, a CCP is not generally a requirement from foreign investors to access a market, but if one is implemented and then badly designed or governed, it could become a negative factor weighing against investment.

[9] https://www.bis.org/cpmi/publ/d101.htm

3.8 Central Securities Depository (CSD)

The WG believes that all identified financial market infrastructures (the CSD included) should follow the CPMI–IOSCO Principles for Market Infrastructures (PMFI)[10]. This is particularly important since foreign investors view the CSD as an important part of the value chain in terms of asset safety. To that end, they require some sort of attestation or due diligence.

The CSD should exhibit a ring-fenced, bankruptcy remote existence. This should manifest itself through an independence of systems and governance, as well as the separation of financial resources and the resilience of the CSD.

The WG advocates the establishment of a single CSD infrastructure across all depository eligible asset classes. The WG believes that:

- The benefits of consolidated infrastructure for efficiency and cost reduction are high for the CSD operator themselves and the more instruments they can operate, the better
- From the investors' and participants' viewpoints, there is a cost in connecting to multiple infrastructures and these costs are substantial and ongoing
- From the regulator's perspective, there is a cost in trying to administer and manage more than one depository infrastructure in a market
- Additionally, there are settlement optimization techniques available which are relevant based on the volumes that the CSD processes, such as partial settlement, auto-collateralization and other techniques

It is recognized that if the CSD for government debt is held within the central bank then there will be hard policy decisions to be made, and advocates would say that markets require competition to ensure market efficiency and low costs for the users. There are other solutions to ensure fair pricing and – for a smaller market – the WG believes that simplicity is an overriding factor in attracting international investor flows.

Whilst advocating for a combined CSD structure is an esoteric topic that is not necessarily intuitive, the WG believes it has merit. As evidence of the benefits of a combined CSD structure, the Hong Kong Monetary Authority (HKMA) recently undertook a study on the Hong Kong market and the stock and bond connect channels. A very conservative estimate of the financial impact of not having a consolidated CSD infrastructure put the opportunity loss at one and a half billion U.S. dollars of netting per day between stocks and bonds.

This view is shared by other markets operating multiple CSDs and is considered to be a much greater burden if there are multiple exchanges and multiple CSDs operating simultaneously within a country. If there is more than one CSD, there are several effects which lead to a sub-optimal outcome, namely:

- The loss of the aggregated liquidity and settlement netting
- Increased collateral management and movement
- Surveillance of investor holdings becomes more fragmented
- The duplication of processes such as identity management and access management

The WG encourages a framework with different rules between the CSD and other FMI structures within the capital market to ensure that the risks associated with each element are appropriately identified and managed. For the CSD element, the operational and financial risks should sit with either the CSD itself and the banks and/or the custodians, rather than the brokers (except where they are acting in a principal role in the trade). There needs to be absolute clarity within the

[10] Principles for financial market infrastructures (bis.org)

framework as to when, and for what, a settlement agent is accountable, and to exclude potential conflicts of interest. This is particularly important in 'no fail' markets.

In the situation where the roles of infrastructure provider and rule setter are combined, there needs to be clear documentation on how the organization will act under each set of circumstances. This should cover situations such as the bankruptcy of a participant – how would the loss of the fees to the CSD be treated? – and other instances where there could be a perceived conflict of interest. In Botswana, where the CSD is part of the stock exchange group, this conflict of interest has presented itself in the context of off-market transaction regulation. Approval is required for off-market transactions but is given by the exchange CEO, although there was a right to appeal. Providers have observed that historically the decision appears to be made on an arbitrary basis and the majority of transactions are pushed onto the exchange despite meeting off-market criteria. This conflict of interest undermines regulatory integrity of the system. Botswana has addressed this concern through introducing new rules which were crafted after wide consultations with the industry.

The governance and transparency of CSD rules are key. The access rules for participants, issuers, other CSDs, and trading venues should be clear and published.

The market should look to fully digitize and should do so properly. This should include guidance regarding the digitization of intermediated flows, a reduction in the burden of investing through automation, and the use of global standards. All securities should ideally be dematerialized and transfer executed via book entry on the CSD platform. The WG believes that immobilization is acceptable, but not as good as dematerialization (which is recommended).

Every CSD should have suitable controls to ensure the 'integrity of issue'. This includes ensuring that securities are not accidently or fraudulently, created or destroyed and that details are not changed. Aspects such as numbering should be carried throughout the system. A demonstrable level of independent assurance and control should be given – 'three lines of defence' – and evidenced. This is likely to involve IT controls as well as asset balance controls and to ensure that the segregation between client and issuer CSD accounts is maintained. There should be planned and transparent reconciliation procedures and resolution methodology in place.

3.9 Governance, General Liability and the responsibilities of a CSD/SSS

Each CSD is entitled to set the terms and conditions of the settlement system. The Securities Settlement Systems (SSS) – including technology, processes and procedures – require transparency. These terms and conditions should be clear and set out the contractual provisions of the CSD/SSS. As with many contractual agreements, these need to be made through negotiation with the CSD and its direct and indirect participants. This should ensure that the burden of the contractual provisions falls equally on all parties, rather than being too favourable to any one party.

One of the most significant decisions that the CSD must make at inception is in establishing the account structure – both the securities account and cash account – how it operates and where it is held. This decision will impact the vital area of asset segregation. Segregation of the client's assets versus the proprietary assets of the local custodian will be driven by the market's legal structure. Protection of the asset for the owner – from the insolvency of the local custody provider of the account – is a prerequisite in order to encourage investment from foreign investors. This paper does not intend to debate the benefits of individual versus global/omnibus accounts structures. Previous analysis can be found in this paper.[11]

[11] ISSA_commissioned_Securities_Accounting_System_research_paper.pdf (issanet.org)

The rules should set out both the access rules and the conditions to be fulfilled by clients of the CSD. They should also address the CSD's investment policy; i.e., how the CSD maintains its liquidity and funding of both operational balances and the assets/financial instruments which it holds as operational risk reserves. It is likely – depending on the size of the reserves compared to the required reserves – that these are held in assets which are both low risk and highly liquid.

It is equally important that the provisions set out what the CSD will not do. The local legal framework and agility will impact whether these provisions are best legislated at the primary or secondary level, or in some jurisdictions whether the CSD rule book is appropriate. It is highly probable that the CSD will also be the registration agent, although where this not the case, it should be noted as such. Additionally, the CSD may offer paying agent services – distributing the dividends and coupon payments to the holders of record – or this function could be offered by firms external to the CSD. Again, clarity is required as to who is accountable for each specific role in the market.

The investment manager (IM) should understand whether it is a client of a brokerage that is a direct or indirect CSD member and understand the implications of these different relationships. The CSD should publish an up-to-date list of participants on its website.

Simplified access rules and documentation should support the CSD's mandate – the more complex the sets of rules and required documentation, the less likely that investors will invest. There is obviously a trade-off between 'enough rules' versus 'too many rules'. However, asset safety and fairness should never be sacrificed for brevity.

The use of user committees has been promoted in certain jurisdictions to allow broader input into the CSD rule-making processes. The WG supports the involvement in the governance processes of those impacted by the rules. It was recognized that such a committee would not have executive powers but recommended that if the comments/suggestions/recommendations coming from such a committee were to be ignored, then the CSD should be obliged to explain why.

3.10 CSD mechanics – Settlement

Settlement is one of the core functionalities of an SSS and the mechanics of settlement can be complex and nuanced. Therefore, the most practical solution is to design the SSS with simplicity in mind, avoiding any manual processes. Manual processes are not the only risk present within a CSD, but they do represent a significant one. Designing them out and utilising data standards such as ISO 20022 allows for better risk management and a better service for clients. The better the services and the higher levels of straight through processing (STP), the greater the chances of a due diligence inspection being successful and resulting in inward flows.

The design of a SSS's processes will vary according to the underlying legal system and any technological choices. The WG believes that emerging markets will have the opportunity – by leapfrogging beyond the capabilities of legacy securities systems – to create systems which are both competitive and cost-effective. This is because there are an existing set of solutions from various providers who can perform the processes required, solutions which have been tested and are currently already operating at existing CSDs. The WG believes that minimal customization should be required and that where an existing process does not fit into the system design, the process should be reviewed to identify the desired outcome rather than the process itself. If large scale customization does occur, then the counter argument against buying an existing system set is that any upgrades would become more expensive and – as they are usually priced in a hard currency – would reduce the business case to buy a system over its lifespan.

All settlement processes should be designed with the highest rates STP and the maximum possible levels of digitization.

Factors which will require consideration are:

1. **Settlement Cycle (i.e. T0, T+1, T+2 etc.)** The settlement cycle refers to the time between the trade occurring (trade date) and when the trade settles with finality. In some emerging markets the settlement cycle can be a substantial number of days, reflecting the historic use of paper, cheques and postal services. It is recommended that a default settlement cycle should be identified and established to allow efficient settlement in the market.

   This default will satisfy the vast majority of transactions. However, where a transaction is of size, or the counterparty risk can be mitigated (if not removed) by changing the settlement cycle on a bilateral basis for a particular trade, this should be allowed.

   If the advice detailed in section 3.8 above – on STP and digitization is accepted, then there are no technological reasons why T+1 or T0 cannot be achieved. The WG would refer the reader to the ISSA T+1 paper[12] for further guidance in relation to T+1 settlement. These challenges articulated in the T+1 paper would be exacerbated in a move to T0 and – in particular – the requirement to prefund the cash leg of the purchase, which is viewed unfavourably by the investor segment. The WG would therefore recommend moving to a T+1 settlement cycle.

2. **Settlement Model.** The Bank of International Settlement (BIS) wrote an excellent paper on Delivery versus Payment (DVP) settlement models[13] in 1992. The three models described are still relevant today, namely:

   i. *"**Model 1:** systems that settle transfer instructions for both securities and funds on a trade-by-trade (gross) basis, with final (unconditional) transfer of securities from the seller to the buyer (delivery) occurring at the same time as final transfer of funds from the buyer to the seller (payment);* (DVP1)

   ii. ***Model 2**: systems that settle securities transfer instructions on a gross basis with final transfer of securities from the seller to the buyer (delivery) occurring throughout the processing cycle, but settle funds transfer instructions on a net basis, with final transfer of funds from the buyer to the seller (payment) occurring at the end of the processing cycle;* (DVP2)

   iii. ***Model 3:** systems that settle transfer instructions for both securities and funds on a net basis, with final transfers of both securities and funds occurring at the end of the processing cycle."* (DVP3)

Model 1 is preferred from an investor point of view to reduce the chance of any default impacting the settlement of a transaction, but all models exist within developed markets.

3. **Account structures.** Securities account structures vary globally and throughout the custody chain. This variance can be due to several factors, such as:

   - Regulation and/or law
   - Market practice
   - The commercial or operating preference of the intermediaries in the chain
   - The investment markets
   - The type of securities
   - The domicile of the investor

Common securities account structures legally possible in capital markets include:

[12] ISSA-T1-Global-Impacts_FINAL-.pdf (issanet.org)
[13] https://www.bis.org/cpmi/publ/d06.pdf

- **Omnibus account:** where there are assets of multiple investors held together either at sub-custodian or CSD level.
- **Segregated account:** where assets are split either at sub-custodian or CSD level
- **Nominee account:** where the assets may be held in an omnibus or segregated account but are registered in the name of a nominee

Omnibus Account Structure

An omnibus account is an account opened in the name of a custodian or a custodian's client, either at sub-custodian or CSD level. The positions held will belong to multiple clients of the custodian. In some jurisdictions – whilst omnibus accounts are permitted – regulations dictate that segregation of the clients and the custodian's propriety assets is required at the sub-custodian and CSD level. Even in jurisdictions where the comingling of client and proprietary assets is allowed, best practice should be to ensure that they are segregated.

To help ensure the safety of the assets, a custodian will typically be obliged to maintain accounts in its own books, recording the individual ownership interest of each client in respect of the securities held in the custodian's omnibus account. Omnibus account naming conventions are also intended to ensure that appropriate asset protections are maintained for clients.

Segregated Account Structure

In some markets, regulation – or local market practice – means that segregated account structures are utilized. There are two different types of segregation that may be adopted:

i. **Segregated Account at Sub-Custodian Level**

This account structure constitutes the holding of securities in the individual account at the sub-custodian level or, in some jurisdictions, in a trust account known as an Intermediate Beneficial Owner (IBO). Although accounts are segregated within the books of the sub-custodian, segregation at the UABO or IBO level is not replicated or maintained at the CSD level where an omnibus account is still used; for example, in the name of the sub-custodian. This omnibus account will, however, be segregated from the sub-custodian's proprietary assets.

ii. **Segregated Account at CSD Level**

Under this type of segregation, securities are held in an individual account in the name of the UABO or IBO in the books of the sub-custodian and the CSD. One of the main benefits of this type of structure is increased asset ownership transparency throughout the chain.

Different perspectives exist in respect to segregated account structures. There are multiple and diverse market practice and laws which mean that there is no consistent global or regional model. Until further legal guidelines or revision of securities law exist – for example, through the Securities Law legislation – or further reform and regulation is mandated, segregation will often be seen in certain jurisdictions – and by certain participants, including regulators – to be a good approach to mitigate legal risk. However, segregated accounts may be less efficient operationally.

Nominee Account Structure

A nominee is typically a company created for the purpose of holding securities on behalf of a client. It holds the securities on trust for one or more clients and often only the nominee company is identified on the shareholder register. A custodian will establish one or more nominee companies to hold securities for their Securities Services clients.

Essentially, registering securities in the nominee's name segregates client securities from the custodian's assets, thus reducing the client risk linked to insolvency of the custodian; for example, a claim from the custodian's creditors. Additionally, the use of nominee accounts provides the custodian with the opportunity to ease the operational burden of asset servicing.

Although a nominee account is not recognized in many markets, the implications of allowing nominee accounts should still be understood and whether they are attractive to investors to increase bankruptcy remoteness from less well capitalised local custodians.

If the structure is recognised, then the nominee would be seen as the legal owner and UABO of the securities held in the account. This can negatively affect the issuer to investor communication since everything is sent to the nominee as the apparent legal asset owner. The use of the nominee will also result in reduced asset ownership transparency and shield the UABO's identity from issuers, investors and other stakeholders.

There is also an increased desire from some asset owners – considering events of recent years – to open accounts directly with the CSD. This mitigates their risk from a credit exposure perspective but also requires a different level of knowledge and competence for the market from the asset owners. The UABO may well not have this competence nor be able to operate effectively in the time-zone. This has led to the creation of a different operating model: the **account operator model** – whereby an investor or intermediary had direct access to open its own accounts at a depository but nonetheless appoints a custodian to operate the accounts on behalf of the client.

An example of this model is where a broker has a clearing membership and a depository account for on-exchange trade settlements in their own name in a domestic jurisdiction. The broker can appoint a custodian as account operator to operate the depositary account on its behalf. Note that the broker retains the clearing membership and the depository account in its own name in the domestic jurisdiction but gives an effective power of attorney over the account to the custodian.

The WG would recommend that a market implements the correct legal and regulatory framework to allow the account operator model as an option.

4. **Payment Model.** The second leg of any settlement is to ensure that payment is made. This can be executed using Central Bank Money (CeBM) or Commercial Bank Money (CoBM). There is an understanding that CeBM is preferable as it reduces the credit risk exposure compared to a CoBM. From the viewpoint of an investor DVP1 in CeBM is normally the optimal outcome. However, there are several markets which use CoBM and – if the commercial banks are well capitalized and the risks associated with CoBM are well understood and managed – the WG believes that either can be acceptable, albeit that investors marginally prefer CeBM.
5. **Settlement Finality.** Final settlement is defined as the irrevocable and unconditional transfer of an asset or financial instrument. The question that needs to be answered is at what point is settlement irrevocable? This could be at a certain time in the day or after a certain process has occurred. It is a function of the decisions made above in point two 'Settlement Model' and point four 'Payment Model', but clarity needs to be given.
6. **Settlement Mechanisms.** It is worth noting that there are several ways of exchanging value. In point 3.10.2 above the paper highlights the DVP mechanisms. However, there are further options for settlement which include:

   - Delivery versus Delivery (DVD) the exchange of two assets
   - Payment versus Payment (PVP) the exchange of two cash flow resulting from netting of trades
   - Free of Payment (FOP) where an asset changes ownership without funds moving within the CSD

   If allowed, there should be clear rules published and monitored by the CSD.

7. **Revocation of transfer orders.** In line with point five 'Settlement Finality', once a settlement has been concluded it should be irrevocable. In certain jurisdictions, it may be possible for a contracting party to revoke their instruction, but it must be clear that this should only be possible under clearly established and documented circumstances and then, only if the final transfer has not yet occurred.
8. **Deposit and withdrawal of securities.** It is the WG's opinion that all securities should be dematerialized within the CSD. If this is the case, then the deposit and withdrawal – outside of issuance and redemption – remains a moot point. However, where securities are permitted to exist in forms other than dematerialized – for example, in certificated or immobilized form – it should be possible for them to be deposited and withdrawn. The CSD's processes for this should be clear, as should the impact on the participants' balances; i.e., when finality occurs. Additional checks should occur to ensure the issue's integrity.
9. **Reconciliation rules.** In all aspects of securities processing there are reconciliations that occur. Where the CSD is the holder of the definitive record of legal ownership of a security, it may be necessary for other market participants to be able to reconcile the holdings recorded in their system(s) with the records of the CSD (as primary or sacrosanct record). Where, for example, a separate registrar function has been created, there is an additional layer of reconciliation that becomes necessary to ensure the integrity of the book entry positions within the CSD when these are being compared to those held/administered by the securities registrar. Given the core functions of a CSD – which focuses on some of the fundamental aspects of market integrity – participants should be mindful of differences between their own records and those of the CSD. These should be raised and addressed in accordance with clearly established market protocols.
10. **Mechanisms to assist in settlement**. The CSD could also offer various mechanisms to assist in settlement, such as setting realistic instruction matching deadlines and facilitating stock borrowing/lending activities. The WG advocates that these are capabilities are useful for the smooth functioning of the market – and settlement within that market – and would encourage CSDs to set up these capabilities with the appropriate rules and market practices. The issue of whether partial settlements are to be allowed (or not) must be publicly available and – if allowed – the conditions under which these mechanisms would be permitted must be clearly set out.
11. **Settlement discipline.** In addition to providing solutions to help settlement occur, the CSD should also have – possibly in partnership with the regulator – options to enforce settlement. This could take place through settlement discipline fines, buy-in, or mandatory buy-in approaches and rules. These should all support the CSD's exposure and default management policies to reduce the risk to any participant of the CSD.
12. **International communication standards.** The WG supports the ISO 20022 WG conclusions on the use of ISO 20022 and a migration to ISO 20022[14] found here. Proprietary standards for messaging should be avoided at all costs.
13. **Physical signatures should not be needed**. Messaging, electronic identification and message security have made physical signatures obsolete. Where there is a legal requirement to have physical signatures on securities transactions – usually through an accident of history – the CSD and its participants should work with the government to remove this need (as noted above).

[14] ISSA-Principles-for-ISO-20022-Migration-21052024-Final.pdf (issanet.org)

3.11 Corporate Actions

Corporate Action (CA) processing is one of the other core functionalities of a CSD. Market practice dictates how CAs are presently processed, which may or may not be optimal. The WG makes the following recommendations:

1. **Issuer communications.** These are the hidden key to a well-functioning market. If issuer communications can be fully automated using ISO 20022 (or other equivalent formats) with clear rules on the options and which – if any – responses are required, and by when, then these can be passed on to the end investors in a fully automated manner. This is equally true for proxy voting – which should be allowed – as well as for voluntary or mandatory conversions. The WG believes that this is a very strong lever for encouraging foreign participation in a market.
2. **Corporate events communications**. Both in respect of issuers, investors, and processing; for example, to ensure events such as proxy voting and cash receipts are clear and timely. The shortening of the settlement cycle to T+1 requires that the CA record date and CA payment date are adjacent.

Many of these topics in both the CSD Settlement section and the Corporate Action sections (3.7–3.11) are covered in the Due Diligence Questionnaires (DDQ) and it is recommended that the CSD looks at the DDQ and works backwards to see if they fulfil the criteria and best practices.

From a foreign investor's perspective, it is best if a CSD has links with other CSDs and can interoperate with these partners. However, whilst making the market more attractive, the absence of such links should not prevent foreign investors from investing.

3.12 CSD Risk Management

Investors require a sound risk management framework in place within the CSD to ensure that legal, credit, liquidity, operational and other risks are being comprehensively managed. This often results in investors looking for evidence to satisfy themselves that a robust set of controls are in place and that these are validated on a regular basis. Assurance should be provided by a combination of management – the functions performed by departments of the CSD – appropriate validation by independent functions – such as risk, compliance and internal audit functions within the organisation – and independent audits by an external party. This is often referred to as a 'three lines of defence' approach and would be familiar to most investors also looking to see the following safeguards in place:

1. **Risk management** – including ICT risk – internal audit and compliance functions.
2. **Specialized advisory committee** – for example, covering audit, risk, and users.
3. **Counterparty risks management** – including guarantee – and margin funds management – including liquidity and funding controls for these amounts.
4. **Participant default** (insolvency) rules and procedures.
5. **Credit and liquidity risks management.**
6. **Market liquidity and volatility management.**
7. **Protection of the securities** of a participant and those of their clients (see above).
8. **Disclosure of the insolvency rules and regulatory provisions** – and restrictions – for the jurisdiction. This should include both those applicable to the CSD as well as its participants in case of default.

3.13 CSD Operational Resilience plans

A further requirement is to have robust operational resilience plans in place. ISSA defines operational resilience for Securities Services as: *"... the ability of a Securities Services provider to deliver critical operations through disruption. This ability enables a Securities Services provider to identify and protect itself from threats and potential failures, respond and adapt to, as well as recover and learn from disruptive events to minimize their impact on the delivery of critical operations through disruption."*

In considering its operational resilience, a Securities Services provider should assume that disruptions will occur and consider its overall risk appetite and tolerance for disruption. In the context of operational resilience, tolerance for disruption is defined as, *"the level of disruption from any type of operational risk a Securities Services provider is willing to accept given a range of extreme scenarios."*

Operational resilience covers both the Disaster Recovery Plan (DR), or Business Continuity Plans in the event that whatever happens to the CSD impacts and is impacted by the supporting providers; i.e., if the CSD is using cloud-based software, what are the resilience plans for that cloud provider? It should also include participants confirming they can operate when the CSD performs its DR test.

Cyber security procedures could be construed as part of the risk management of the CSD, but they merit their own section here because they are so important. There is limited appetite from CSDs to publish their cyber response plans and, even so, publishing them in detail is not thought to be a good idea. However, there needs to be a credible amount of knowledge shown by the CSD and the market, hence a high-level plan/overview should be available to demonstrate that the market has thought about the response.

There is also the operational resilience viewed through the lens of the possible financial impacts – these were covered in the Recovery, Resolution and Resilience Working Group paper[15].

3.14 CSD Fees

Fees need to be transparent and equitable to both local and international investors. If the CSD is compliant with the PFMI Guidance, there will be an obligation to publish fees and the WG strongly supports this approach. Fees should be published, including discounts for volumes etc., to allow for transparency. The WG discussed that fee transparency is good in principle. However, attempting to make a complex structure fully transparent is not as helpful as having a simple pricing structure. The balance within a pricing structure must be that the number of items and services that an investor will pay for must be small enough to be understandable and easily modelled. Interestingly, the ability for a CSD to benchmark its fees to others may allow for improved fee visibility and ultimately reduction. The end result must be a level playing field between foreign and domestic participants if a market wishes to encourage developmental capital flows.

It was recommended that the fee schedules should be published on the CSD website and that these include all the applicable fees – and perhaps taxes – that would be levied so that investors would be aware of the full costs. If different products have different schedules, these should also be visible. Furthermore, the addition of a calculation tool for modelling purposes should be made available in the best-case scenario. This should show access fees and transaction fees that would be applicable; for example, if having an account cost USD 10,000 and each transaction were to cost USD 1.00, then if only one trade were to settle in a year, it would effectively cost USD 10,001 for that one transaction.

[15] ISSA-2021-Review-of-Critical-Functions-and-Stress-Scenarios-2022-02.pdf (issanet.org)

However, if 10,000 trades were to settle in a year, it would only cost USD 2.00 per trade; i.e. USD 10,000 for the account and USD 10,000 for the trades. Therefore, it was agreed that models should include the holistic cost blocks and – as a minimum – transaction and maintenance fees. The periodicity of the deduction of fees from the account also needs to be known.

It was recognized that some CSDs are not-for-profit, whilst others are profit driven. It was suggested that not-for-profit CSDs would be more likely to have greater transparency, although not in all cases. The balance of viability versus profitability versus fee levels is complex but as a minimum the outcomes must support the viability of the CSD.

The fees published and accounted for are those charged by the CSD to its members and there is no obligation on the CSD to ensure that the end investor understands the fee structure throughout the entire value chain; i.e., from CSD to local custodian to global custodian.

A good example of a transparent CSD fee structure is found at HKEX:

1. The fees schedule is posted on the website[16] for easy reference by the public.
2. The methodology is simple and transparent to the investors.
3. For a new fee, or an amendment to the existing fees, the revised schedule requires approval from the local regulator.
4. Scheduled statements are available for participants to download electronically.

It is highly recommended that transaction costs – both implicit and explicit – are reasonable and competitive. High fees will act as a brake on investment.

[16] https://www.hkex.com.hk/Services/Rules-and-Forms-and-Fees/Fees/Securities-(Hong-Kong)/Trading/Transaction?sc_lang=en

4 Conclusion

Ensuring that a market is attractive to foreign portfolio investors and domestic investors is not a mutually exclusive exercise but rather a complementary one. All investors benefit from a liquid and well functioning market. Creating a market where the following elements are all present is, without doubt good, for all participants, domestic or foreign:

- Market liquidity
- Clear and good shareholder rights for all shareholders, including minority ones
- Transparent tax rules
- Sound rule of law
- Good AML and KYC controls
- Well governed, resilient and risk-managed CSD and market infrastructure
- Clear ownership rights
- Appropriate settlement cycle (T+1)
- Transparent fees throughout the securities value chain

Do foreign investors require more? The answer is yes but not significantly more. To encourage external investment there also needs to be consideration given as to:

- Foreign exchange risks – driven by fiscal and monetary policy approaches – including the ease of repatriation of the profits and the tax processes aligned with this
- The ability for the local market to support the preferred access to local funds (central bank money) and either a well-capitalised custodian or holding an account directly at the CSD)

This paper sets out many choices for all parties to consider as the individual country modernises its securities laws and industry. Creating the right balance across all the choices highlighted by the WG is not a trivial exercise and the answer may differ given various countries' historical and legacy infrastructures. These choices will mitigate some risks, eliminate others, and possibly leave some remaining.

Foreign investors will then weigh up the outcome against their risk appetite and make their decision. However, one need that both domestic and foreign investors have is that there must be enterprises issuing bonds and equity where the growth and returns of those enterprises outweighs the risks of all the above factors not being optimised. This is when foreign and domestic investments are made.

5 Appendix A

List of participants of the Working Group:

Firm Name	First Name	Last Name
Central Securities Clearing System Plc	Haruna	Jalo-Waziri
Central Securities Depository Ghana Limited	Melvina	Amoafo
Deposito Central de Valores (DCV)	Javier Andres	Jara Traub
Nasdaq Inc.	Magnus	Asgeirsson
NSDL Group	Rakesh	Mehta
Hong Kong Exchanges and Clearing Limited	Richard	Shum
Depozitarul Central S.A.	Lavinia	Gheorghe
Datos Insights	Vinod	Jain
Central Securities Clearing System Plc	Femi	Onifade
Depozitarul Central S.A.	Mirela	Bratu
The Stock Exchange of Thailand	Pichaya	Chomchaiya
Euronext N.V	Henrik	Ohlsen
Strate (Pty) Ltd	Pheona	Härtel
Central Securities Clearing System Plc	Onome	Komolafe
Americas' Central Securities Depositories Association ACSDA	Bruce	Butterill
Central Securities Clearing System Plc	John	Eze
Central Securities Clearing System Plc	Olayemi Sehinde	Agbeleye
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BNY	Christopher	Lam
Macao Central Securities Depository and Clearing Limited	Jiahua	Liu
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UBS Group AG	Laura	Hale
Standard Chartered Bank	Catherine	Tinavapi
Deutsche Bank AG	Louis	Jin
B3 Brazilian Exchange and OTC	Ana Paula	Theodoro
Deutsche Börse Group	Piotr	Sokol
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The Standard Bank of South Africa	Sally	Jacques
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