Framing the Issues: Modernizing the Public Equity Market in Nepal

JOHN SCHELLHASE, STACI WARDEN

ABOUT THE MILKEN INSTITUTE

The Milken Institute is a nonprofit, nonpartisan think tank.

For the past three decades, the Milken Institute has served as a catalyst for practical, scalable solutions to global challenges by connecting human, financial, and educational resources to those who need them. Guided by a conviction that the best ideas, under-resourced, cannot succeed, we conduct research and analysis and convene top experts, innovators, and influencers from different backgrounds and competing viewpoints. We leverage this expertise and insight to construct programs and policy initiatives.

These activities are designed to help people build meaningful lives in which they can experience health and well-being, pursue effective education and gainful employment, and access the resources required to create ever-expanding opportunities for themselves and their broader communities.

ABOUT THE GLOBAL MARKET DEVELOPMENT PRACTICE

The Milken Institute's Global Market Development practice works to catalyze private-sector-led growth and economic prosperity in developing countries and emerging markets. The practice pursues this mission by facilitating informed and coordinated policymaking processes across government institutions, private-sector stakeholders, and civil society, and by training a generation of leaders in central banks, finance ministries, and securities regulators, among other financial institutions.

ABOUT THE ASIA CENTER

Based in Singapore, the Milken Institute Asia Center extends the reach and impact of Milken Institute programs, events, and research to the Asia-Pacific region. It identifies opportunities to leverage the Institute's global network to tackle regional challenges, as well as to integrate the region's perspectives into the development of solutions to persistent global challenges.

CONTENTS

Introduction and Overview

The government of Nepal, the first elected under the new 2015 constitution, is undertaking an ambitious development agenda to transition the economy from dependency on aid and remittances to a private-sector-led growth model. As policymakers widely recognize, this transformation will require significant additional levels of both domestic and international investment. To this end, the government is contemplating a broad agenda for capital market development, including the modernization of the Nepal Stock Exchange (NEPSE).

Within the wider financial ecosystem, a well-functioning stock market can make a significant contribution to economic growth and diversification by enabling firms to make long-term investments in research and development and market expansion, while also promoting strong standards of corporate governance and transparency. Stock markets also encourage savings and provide opportunities for average citizens, as well as institutional and foreign investors, to participate in the growth of the national economy by investing in listed companies, either directly or through collective investment products such as mutual funds. As documented in this report, market stakeholders in Nepal believe that key institutional and regulatory reforms could help further empower the NEPSE to play this important role in Nepal's economic transformation.

To explore the major priorities for—and key obstacles to—developing the public equity market in Nepal, the NEPSE partnered with the Milken Institute to organize a strategic planning roundtable in Kathmandu on May 31, 2019, during a meeting of the executive committee of the South Asian Federation of Exchanges (SAFE).[1] The day-long event convened government officials, NEPSE management and board members, banking executives, stockbrokers and investors, international development partners, and SAFE members.[2] Roundtable participants discussed the options available and lessons learned from other markets for modernizing the public equity market in Nepal.[3]

1 To encourage a candid exchange of ideas, the discussion was held under the "Chatham House rule." In this format, participants can share information and ideas from the roundtable with external audiences. However, participants may not publicly attribute a particular statement to an individual or institution by name.

2 The South Asian Federation of Exchanges is an association of stock exchanges that promotes the development of securities markets in the region through knowledge sharing and developing common regional standards for listing, trading, clearance, settlement, and investor protection.

3 The NEPSE and the Milken Institute undertook a survey of Nepali businesses in May 2019 to better understand the current business environment, corporate financing needs, and perceptions of the NEPSE among listed and unlisted companies. Results of this study, which received 126 responses, are included throughout the report.

The following report summarizes the ideas, recommendations, and outstanding concerns of roundtable participants. It is organized into three parts:

I. FOUNDATIONS FOR CAPITAL MARKET DEVELOPMENT: POLITICAL AND MACROECONOMIC STABILITY AND A STRONG, STABLE BANKING SECTOR: Roundtable participants assessed the extent to which Nepal met key prerequisites for capital market development, with a focus on political stability, macroeconomic indicators, and the state of the banking sector. They also evaluated the remaining challenges in these areas. In particular, they identified several interrelated challenges for the banking sector, including the issues smaller firms face in accessing bank credit, the fact that the banking sector is running up against maximum regulatory lending limits, and the potential concentration risks that emerge from the dominance of banking sector issuances in the debt and equity capital markets.

II. DEVELOPING THE NEPSE: ATTRACTING ISSUERS, EXPANDING THE INVESTMENT BASE, AND IMPROVING THE TRADING ENVIRONMENT: Roundtable participants discussed what steps NEPSE could take and what regulatory barriers needed to be removed to attract new non-financial corporations to list shares on the NEPSE. They also explored ways to deepen and widen the NEPSE's domestic retail investor base while also attracting international investor flows. Additionally, roundtable participants stressed the importance of ensuring market integrity, improving market infrastructure, and further developing the ecosystem of market intermediaries as part of a cohesive strategy for improving the overall trading environment and increasing market liquidity.

III. OWNERSHIP, GOVERNANCE, AND REGULATION: Roundtable participants generally agreed that modernizing and improving the NEPSE will likely require reforming its ownership and governance structures. They discussed the importance of privatization and what form government divestment might take, while also emphasizing the need to reform the composition of the NEPSE board to include more independent directors. Finally, roundtable participants emphasized that ensuring the Securities Board of Nepal's operational independence and strengthening its regulatory capacity would be crucial for overall capital markets development.

The report concludes with a summary of the main themes discussed by roundtable participants and a detailed table of the concrete recommendations that emerged from the discussion.

PART ONE

Foundations for Capital Market Development: Political and Macroeconomic Stability and a Strong, Stable Banking Sector

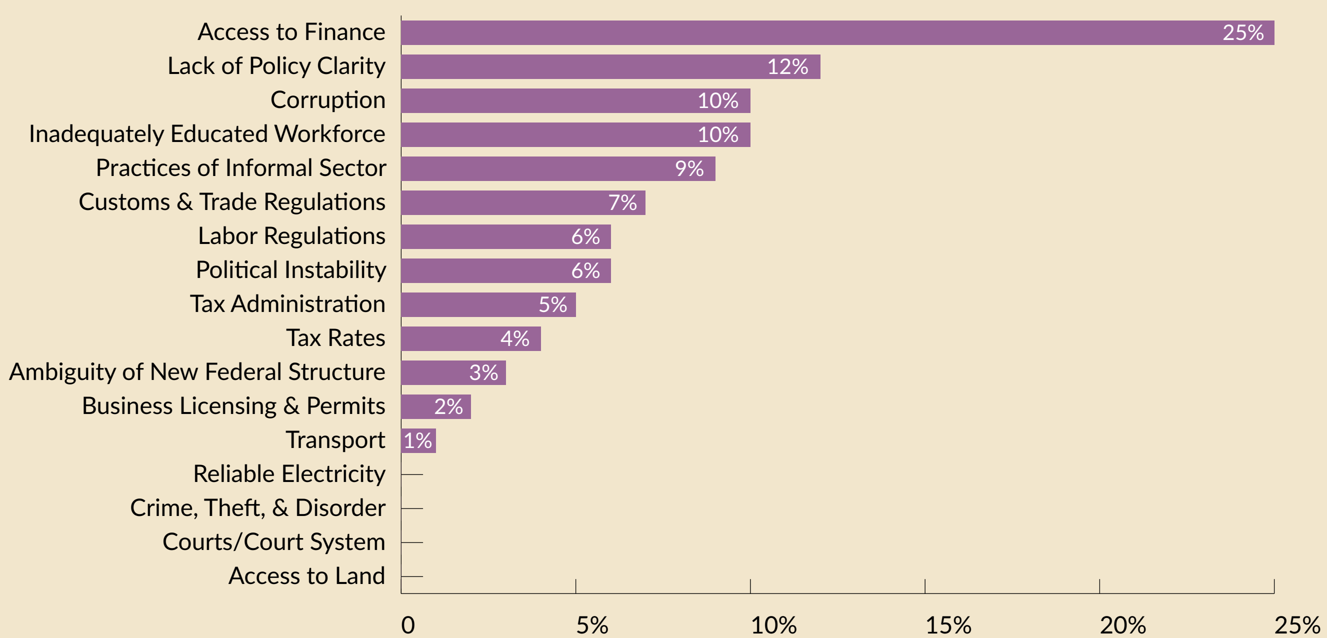
Global experience has shown that capital markets typically develop only after certain prerequisite conditions are met. These prerequisites include political stability, macroeconomic stability (notably sound fiscal policy and a low inflationary environment), and a strong, stable banking sector. All contribute to a predictable macroenvironment that enables economic growth and incentivizes long-term savings and investment. While roundtable participants identified potential challenges for Nepal, as detailed below, they generally agreed that the essential foundations for further capital market development are now in place.

BOX A. The Business Environment in Nepal: New Survey Evidence

To provide policymakers with more accurate data on the current business environment, the NEPSE and the Milken Institute fielded a survey to Nepali companies in May 2019 and collected responses from 126 firms. The headline finding of the survey is that the business community now perceives access to finance to be the most severe obstacle for private sector growth in Nepal.

Chart A: What is the Top Obstacle Currently Facing Your Company?

% of firms selecting option as their top obstacle



Source: NEPSE-Milken Institute 2019 Business Survey

Table A. Comparing the 2019 Survey Findings with Past Studies

Selected Indicators	NEPSE-MI 2019	ES 2013	ES 2009
Political Instability	6%	49%	62%
Electricity	0%	26%	27%
Access to Finance	25%	9%	3%
Corruption	10%	1%	0%
Inadequately Educated Workforce	10%	1%	2%
Practices of Informal Sector	9%	3%	0%

Source: NEPSE-Milken Institute 2019 Business Survey, World Bank Enterprise Surveys

These results reflect the impressive progress Nepal has made in recent years. As shown in Table A, they differ significantly from business perceptions six years or a decade ago. In the 2009 and 2013 World Bank Enterprise Surveys (ES), political instability and access to electricity were the top obstacles identified by the Nepali business community. But only 6 percent of firms surveyed in 2019 cited political instability as their top obstacle. None selected access to electricity.

POLITICAL AND MACROECONOMIC STABILITY

Several roundtable participants observed that the discussion of modernizing the Nepal Stock Exchange was happening at a fortuitous moment in Nepal's history. After decades of turmoil, the country has achieved a relatively strong level of political stability through adopting a new constitution in 2015 and holding successful legislative and presidential elections in 2017 and 2018. A new national government formed in 2018 with a large majority of public support. As discussed in Box A, the NEPSE and the Milken Institute surveyed Nepali businesses to inform the roundtable discussion, and the results suggest recent political developments have dramatically improved the national business environment. In another sign of significant national progress, Nepal's economy has been growing by over 6 percent since 2017.[4] In addition, key macroeconomic indicators have stabilized since the 2015 earthquake and a subsequent Indian trade embargo. The inflation rate has halved in the last three years, and the IMF projects that the annual inflation rate will remain steady between 5 and 7 percent through 2024. Notably, Nepal also boasts an enviable public debt-to-GDP ratio of approximately 30 percent.

Some macroeconomic vulnerabilities remain, though. A couple of roundtable participants raised the external sector as a concern. Domestic consumption depends on remittance flows, which in 2018 amounted to over US$7 billion or roughly 25 percent of GDP. While the volume of remittance inflows continues to grow annually, the growth rate is slowing. At the same time, Nepal's trade deficit has been increasing and is now approximately 38 percent of GDP. The decrease in the growth of remittance flows and the increasing trade deficit has resulted in a rapidly expanding current account deficit.[5] In this context, roundtable participants emphasized the need to increase domestic energy production and promote the expansion of the services sector.

4 With a GDP per capita of roughly US$1,000, poverty remains a pressing challenge in Nepal. But the country has made significant progress in alleviating poverty over the last two decades. In 1996, 68 percent of the population lived on less than $3.20 a day at 2011 international prices; by 2011, this figure had fallen to 25 percent of the population. See "Appendix II: Country Poverty and Social Indicators" in "Macroeconomic Update: Nepal," ADB, (April 2019).

5 As the Asian Development Bank (ADB) concludes, "Remittances will continue to grow healthily though falling substantially behind trade deficit expansion." See "Macroeconomic Update: Nepal," Vol. 7, No. 1, Asian Development Bank, (April 2019).

BOX B. Developing the Wider Financial Markets Ecosystem and the Commodities Exchange

While the agenda of the day primarily focused on the public equity market, there was a consensus among roundtable participants that the Ministry of Finance and Securities Board of Nepal (SEBON) should take a holistic approach to financial sector development. As several participants argued, the various components of the financial sector ecosystem reinforce one another and will likely develop in tandem. To this end, roundtable participants explored the importance of further developing Nepal's debt market and building complementary derivative, repo, and securities lending markets.

They also emphasized the need to strengthen the country's commodities market, given the agricultural sector accounts for about 30 percent of GDP and over 60 percent of domestic employment. In an economy like Nepal's, well-functioning commodities markets can have a powerful, direct impact on average workers' lives. However, as roundtable participants noted, developing commodities markets introduces additional challenges that policymakers and market participants must address, including standardization, quality assurance, warehousing, and physical delivery.

The Mercantile Exchange Nepal (MEX) was established in 2009 to help overcome these challenges and now operates spot and futures markets for various agricultural products, oil and gas, and base and precious metals. In 2017, the legislature passed the Commodities Act, which created a formal legal structure for the MEX and appointed SEBON as the regulator for the commodities exchange. The regulations required to implement the Commodities Act fully are currently being put in place. Due to concerns about financial literacy as well as internal regulatory capacity, one participant explained, SEBON is "taking a step-by-step and slow approach to developing the commodities market."

THE BANKING SECTOR

In addition to political and macroeconomic stability, a strong and stable banking sector is crucial for further capital market development for several reasons. A well-functioning banking sector is essential for the transmission of monetary policy, and a benign inflationary environment and reasonably stable interest rates are fundamental to the development of longer-term lending products. In addition, inter-bank lending and repo markets help form the short end of the yield curve.[6] Banks are also among the earliest active participants in capital markets, both as issuers and investors. Moreover, capital markets development typically proceeds in concert with the development of the wider financial system, including the banking sector and complementary markets, as discussed further in Box B.

6 As Varva et al. (2016) write, "From the monetary policy perspective, money markets play a central role in monetary policy transmission because of the effects money market rates have on other interest rates and for other important macro variables in the economy. When money markets function normally, the central banks can influence the longer-maturity rates by steering very short-term money market rates to keep them stable and close to the official policy rates." See "Framework for Developing Money Markets in Frontier and Emerging Market Economies," European Bank for Reconstruction and Development (March 21, 2016).

Roundtable participants generally described Nepal's banking sector as a transparent, profitable industry that had widespread public confidence. They highlighted the leadership, institutional capacity, and independence of the industry's regulator, the Nepal Rastra Bank (NRB), as crucial for the banking sector's overall strength. Participants also noted that the Nepali banking sector and the equity market have developed together. Banks and other financial institutions in Nepal are required by regulation to issue shares on the NEPSE. According to a few roundtable participants, meeting the governance and financial reporting standards required of listed companies has helped banks become some of the country's most transparent, well-managed businesses.

But roundtable participants also identified three areas of concern for the banking sector: the mismatch between banks' product offerings and the needs of small and medium-sized enterprises (SMEs); banks' inability to keep up with the credit demands of a rapidly growing economy due to an insufficient deposit base; and possible concentration risks for the financial system given that bank issuances dominate both debt and equity markets. Each of these limitations is described below. However, several roundtable participants viewed these challenges as calls to action to further develop the capital markets in Nepal.

First, according to several roundtable participants, banks are not adequately serving SMEs in Nepal due to poor product design for smaller firms and over-reliance on collateral-based lending.[7] According to one participant, many banks "are not able to make good judgments on the basis of business plans" and so rely heavily on collateral. This disposition toward collateral is exacerbated, other participants noted, because many Nepali businesses are not able to provide the financial documentation banks use to assess creditworthiness. One participant believed that pre-approved loans for some firms, as well as the expanded use of FinTech credit scoring models, could help overcome some of these obstacles.

Second, at a larger structural level, while the demand for lending has increased rapidly in Nepal, the national deposit base has grown at a slower rate. As a result, the banking sector is operating at the edge of its regulatory lending limits. As one participant from the banking sector explained at the roundtable, "We can lend 80 percent of our deposit base, and the bigger banks have lent out 77 or 78 percent. Smaller banks are at 80 percent or over 80 percent even." The consequence is that many Nepali firms seeking to grow are unable to access bank financing, limiting the overall growth and development of the economy.[8]

7 According to the 2013 World Bank Enterprise Survey, 90 percent of business bank loans in Nepal required collateral, and on average, the value of the collateral banks demanded was over 350 percent of the amount of the requested loan.

8 "The short-term fix," one participant said, "is that the government of Nepal has to spend its money." The Nepali government notoriously does not spend its full annual budget or does so irregularly, and so projects are postponed, invoices and workers go unpaid, and there is less cash in the economy to be deposited in banks. This same participant believed that Nepal's new federal structure should improve government spending patterns because local and provincial leaders will feel more pressure from constituents to execute on projects.

Third, several roundtable participants worried about systemic risks for overall financial stability introduced by the dominance of banking sector issuances in both the debt and equity capital markets. In the debt market, one participant explained, "There is no issuance of corporate debt except by banks and financial institutions. What this means is that default risks are 100 percent concentrated in the banking sector." The situation is only slightly better in the equity market, where banks and financial companies represent about 75 percent of listed firms, and their stocks are about 65 percent of total market capitalization.

With such a large number of financial issuers dominating the stock market, the NEPSE's overall performance will be highly correlated to that of the banking sector. Indeed, key market indicators, such as those highlighted in Table 1 on page 14, generally reflect broader developments in the banking sector. For example, new regulations from the NRB aimed at banking sector consolidation resulted in a decrease in the number of listed companies starting in 2015/2016. Likewise, the increase in market capitalization and trading activity during the same period reflected strong banking sector profitability as well as new NRB policies that required financial institutions to increase their paid-up capital significantly. The subsequent drop in these numbers in 2017/18 related to a liquidity crisis within the banking sector as well as an overall market correction after the earlier rapid increase in the NEPSE index.[9]

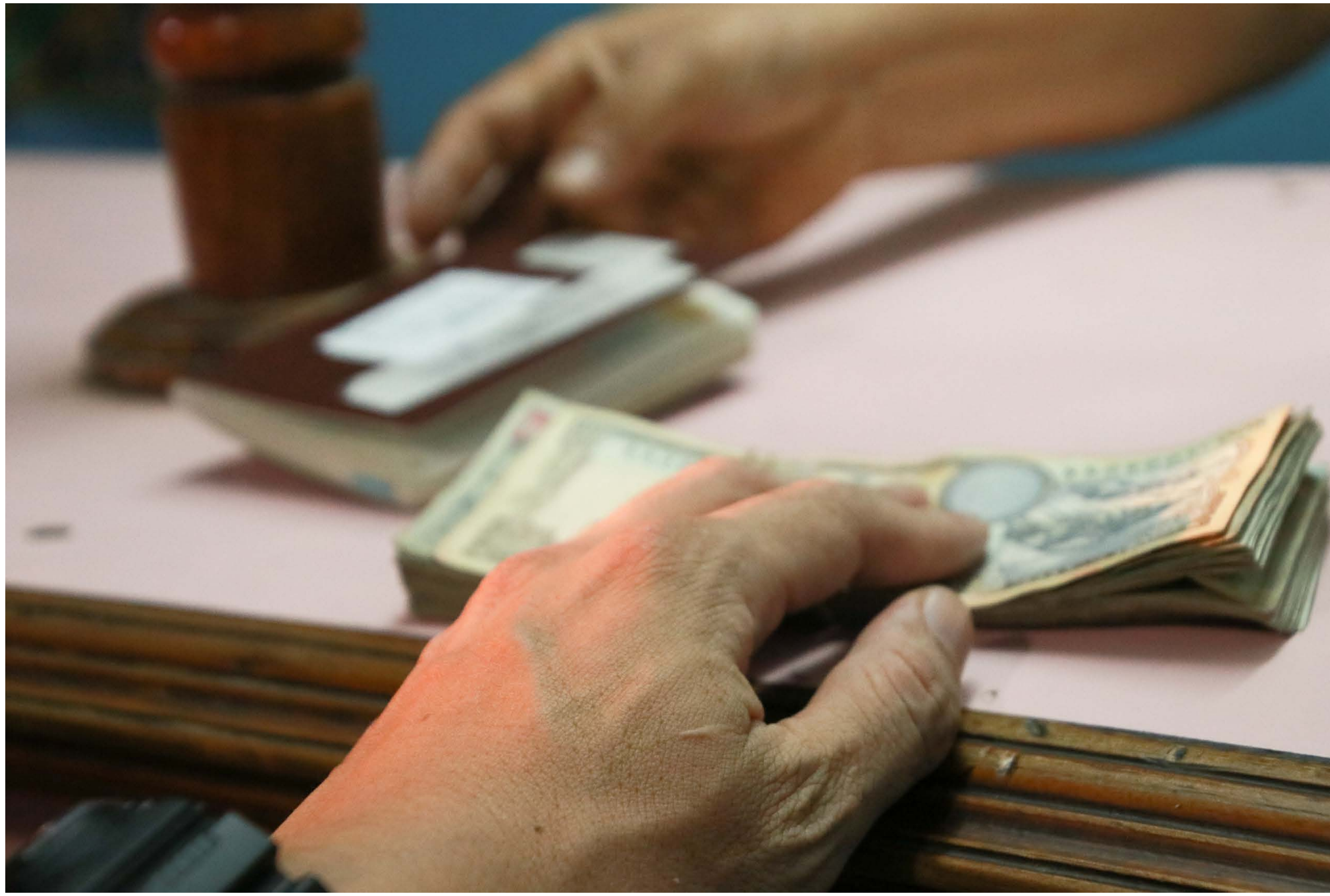
Given how closely the NEPSE's performance tracks banking sector developments, a banking crisis could precipitate a major downturn in the stock market, which could then negatively affect the ability of both banks and non-financial corporations to raise capital in the market. As several participants highlighted, contagion risks between the banking sector and equity market are further exacerbated by the fact that Nepali investors are using money borrowed from banks to invest in banking stocks. The anticipated introduction of margin lending in Nepal (using banking stocks or cash deposits as collateral to invest in a stock market dominated by banks) could heighten these risks.[10]

9 The analysis in this paragraph is based on interviews with NEPSE staff.

10 In April 2019, the NEPSE began processing margin trading applications from brokers, and at the time of the roundtable, the NRB had tentatively approved margin trading permits for two brokerage firms.

"The entire program," one participant warned, "is doomed to be dependent on the health of the bank and finance stocks, which could be a very vicious cycle."

Together, these challenges—the difficulties SMEs have raising financing from banks, the fact that banks have reached their lending limits, and the potential systemic risks of Nepal's bank-dominated capital markets—make a strong case for expanding the use of capital markets by non-financial corporations in Nepal, according to several roundtable participants. As one executive from the Nepali banking sector said, "There is a huge opportunity to grow the capital markets before we figure out how to get more liquidity into the banking sector. There is policy stability, we have electricity, and everyone wants to grow their businesses. For that, they need capital."



PART TWO

Developing the NEPSE: Attracting Issuers, Expanding the Investment Base, and Improving the Trading Environment

The Nepal Stock Exchange was established in 1993, replacing the Securities Exchange Center as the main venue for trading government debt securities and corporate equities. When the NEPSE trading floor opened in 1994, the exchange had 62 listed companies. It has grown substantially since then. In 2018, the NEPSE had 196 listed companies and a market capitalization of roughly US$14 billion or about 48 percent of GDP.

TABLE 1: Key NEPSE Indicators

Market Indicators	2013/14	2014/15	2015/16	2016/17	2017/18
Market capitalization (US$ billions)	10.8	9.9	17.8	17.5	13.9
Market capitalization, as % of GDP	53.8	46.4	83.9	70.3	47.7
Number of listed companies	233	232	230	208	196
Average daily turnover volume (US$ millions)	3.4	3.0	6.6	8.4	5.1
Annual turnover volume (US$ millions)	787.1	657.7	1,548.2	1,930.3	1,179.1
Annual turnover ratio (% of market capitalization)	7.3	6.6	8.7	11.0	8.5
NEPSE Index	1,036.1	961.2	1,718.2	1,582.7	1,212.4

Sources: Securities Board of Nepal, Nepal Stock Exchange, and author calculations based on GDP and exchange rate data from the Ministry of Finance of Nepal

Given that the foundations for market development appear to be in place, the government of Nepal—which currently owns the NEPSE—is contemplating steps to further develop and modernize the exchange. The roundtable discussion was designed to inform this agenda. As captured here in Part II, roundtable participants explored practical solutions that the NEPSE could pursue to i) attract new companies to issue shares, ii) widen and deepen the NEPSE's investor base, and iii) improve the overall trading environment. As discussed in Part III below, roundtable participants also discussed how reforms to the exchange's ownership and governance structure could facilitate and accelerate the NEPSE's institutional development.

ATTRACTING ISSUERS

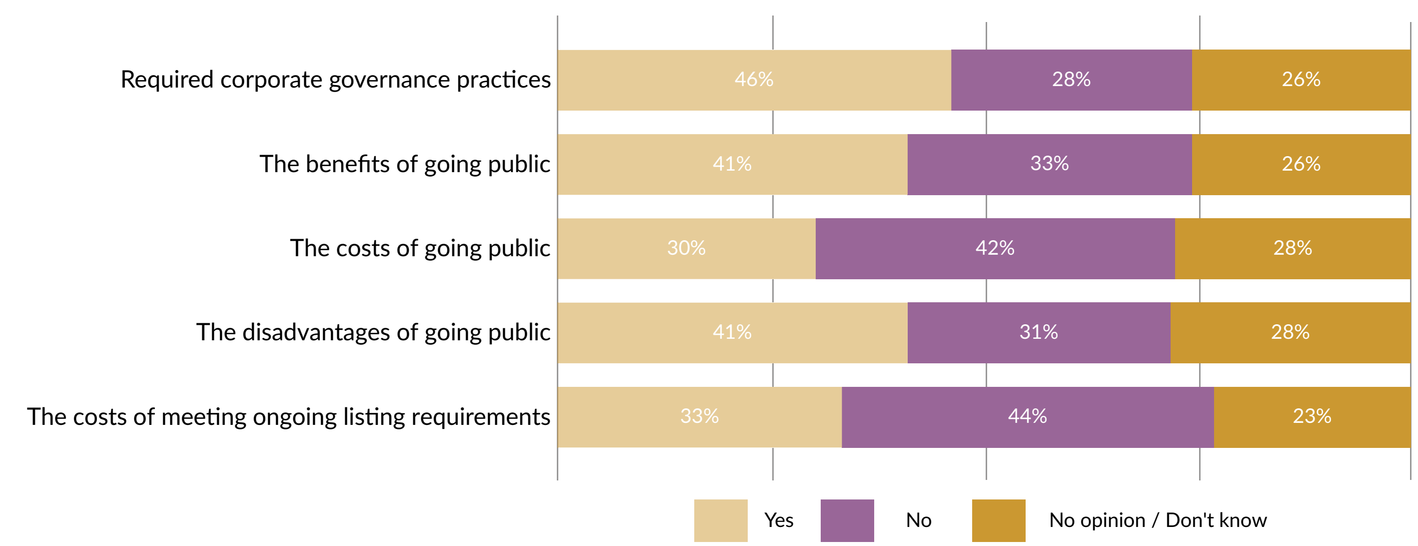
With around 200 listed companies and market capitalization near 50 percent of GDP, the NEPSE is a relatively large stock exchange given the size of the Nepali economy. However, the size of the exchange does not necessarily mean that the NEPSE is effectively attracting listings because banks, insurance companies, microfinance institutions, and hydropower companies are required by regulation to sell at least 30 percent of their shares to the public. Most IPOs in the NEPSE's history have come from these sectors, and it has been over a decade since a company that was not required to list did so.

As discussed in this section, there was widespread consensus at the roundtable that, to facilitate capital investments into growing non-financial sectors of the Nepali economy, the NEPSE would need to improve its marketing to established firms and undertake a more deliberate effort to convince them of the benefits of going public. In addition to better marketing to larger firms, roundtable participants also considered how NEPSE could expand the pool of potential listers by better catering to the needs of SMEs and investors at earlier stages of the firm lifecycle. Finally, roundtable participants stressed that there are regulatory barriers that impede new NEPSE issuances, including a regulatory pricing cap for IPOs that severely limits the attraction of an equity listing.

"NO ONE REACHED OUT TO US": THE NEED FOR A NEPSE MARKETING STRATEGY AND POTENTIAL MESSAGING ON THE VALUE OF GOING PUBLIC

Several roundtable participants argued that before considering whether to go public, unlisted firms need convincing that the time and costs of preparing IPO documentation, reforming their corporate governance, and adopting new financial reporting practices are worth the effort. However, unlisted firms in Nepal appear to be broadly unaware of the potential value of listing or of what listing entails. According to the NEPSE-Milken Institute survey, only about 40 percent of unlisted companies reported having adequate information about the process and potential benefits of listing on the NEPSE, while only about a third said they had a good sense of the costs of getting and staying listed.

CHART 1: Unlisted Companies: Awareness of Process, Benefits, and Costs of Listing
Do you believe your company's management team has adequate information about the following aspects of being a listed company?



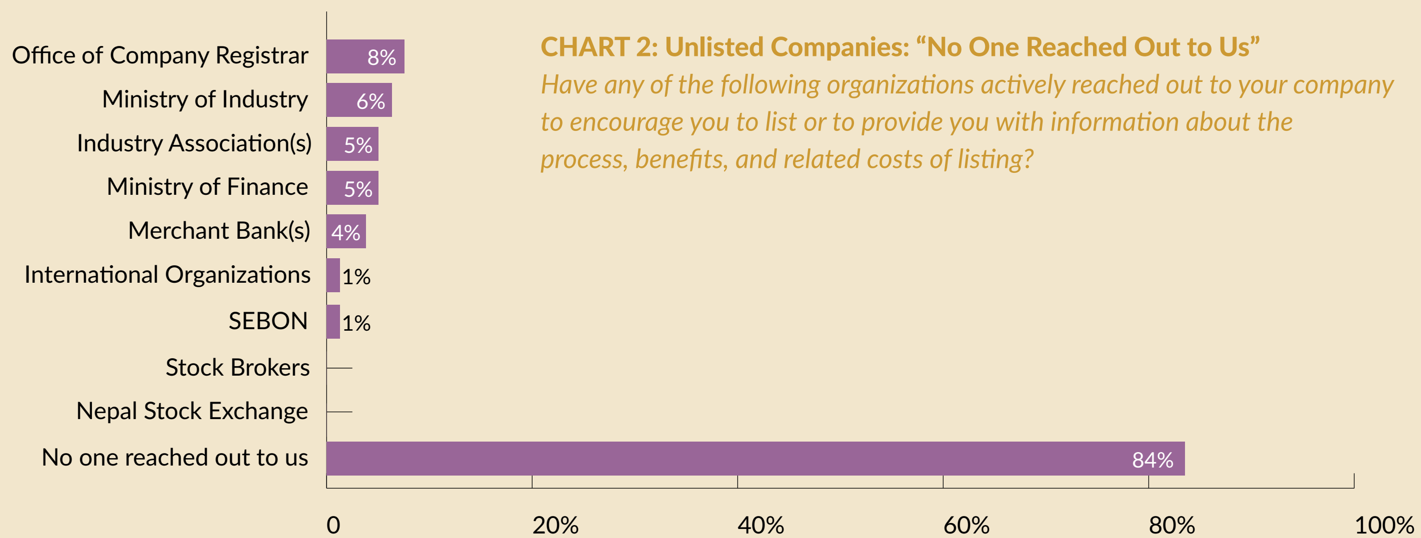
Source: NEPSE-Milken Institute 2019 Business Survey

This widespread lack of awareness is likely a consequence of limited educational outreach to unlisted firms on the benefits of listing on the NEPSE. According to survey results, 84 percent of unlisted firms reported that no organization had reached out to their company to provide information about the process, benefits, and related costs of listing. None of the listed firms in the survey had received any educational outreach or marketing from the NEPSE itself.

However, the survey results also showed there is an appetite among Nepali firms to learn more. Nearly 80 percent of unlisted firms said that they would be interested in seminars or trainings to learn more about the process of becoming a listed company. Additionally, when asked to rank potential priorities for the development of the NEPSE, unlisted firms in the survey placed developing a marketing strategy at the top of the list.

CHART 2: Unlisted Companies: "No One Reached Out to Us"

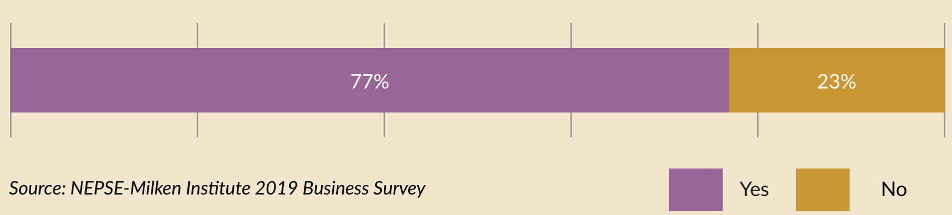
Have any of the following organizations actively reached out to your company to encourage you to list or to provide you with information about the process, benefits, and related costs of listing?



Source: NEPSE-Milken Institute 2019 Business Survey

CHART 3:. Unlisted Companies: Strong Interest in Learning More

Would your company be interested in seminars or trainings to learn more about the process of becoming a listed company?



Source: NEPSE-Milken Institute 2019 Business Survey

Given the opportunity to market going public to unlisted firms, roundtable participants discussed what kind of messaging would be most persuasive to private owners. A couple of participants pointed to the experience of the Bombay Stock Exchange (BSE) as a potential model for the NEPSE. According to one participant, the BSE typically presents private owners with four "selling points" when telling them about listing:

- **ACCESS TO FINANCE:** "Any company listed on the stock exchange," this same participant said, "has better access to capital—and at a better cost—than a company which is not listed." In addition to the capital raised through the sale of shares, the ongoing financial reporting and corporate governance requirements for listed companies reduce a firm's credit risk and improve its standing with lenders.

- **WEALTH CREATION FOR THE FIRM'S PRIVATE OWNERS:** If private owners sell 30 or 40 percent of the company to the public, they can invest the capital into growing the firm and increase its value. At a later date, they can sell additional shares for an even higher valuation.

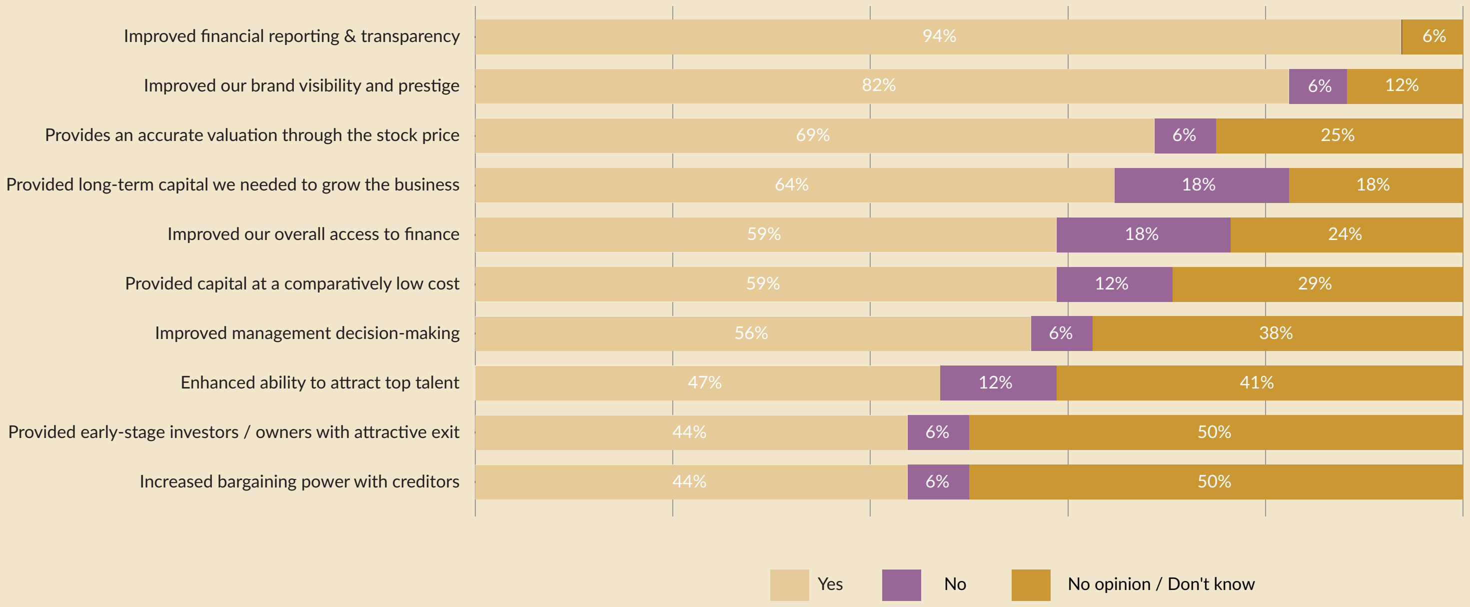
- **ABILITY TO MAINTAIN CONTROL:** There is a perception among unlisted firms that going public means losing company control. As the above point suggests, many private owners maintain ownership of more than half a company's shares even after going public, and so they can continue to have significant influence over the direction of their businesses.

- **VISIBILITY AND PRESTIGE:** A listed firm has its name and share price in the business papers daily. Members of the general public own a part of the company and talk about its price and prospects with family and friends. These aspects of a public listing give the founders and management team a certain cachet that, in the BSE's experience, helps motivate private owners to list.

In several of these areas, the NEPSE could effectively point to the positive experience of listed firms as it markets going public to unlisted companies. NEPSE-Milken Institute survey results show that about 60 percent of listed firms believed a NEPSE listing improved overall access to finance. Only 12 percent said that listing resulted in a loss of company control. Finally, 94 percent of listed companies reported that listing on the NEPSE improved their brand visibility and prestige.

CHART 4: Experience of Listed Companies: The Benefits of Listing

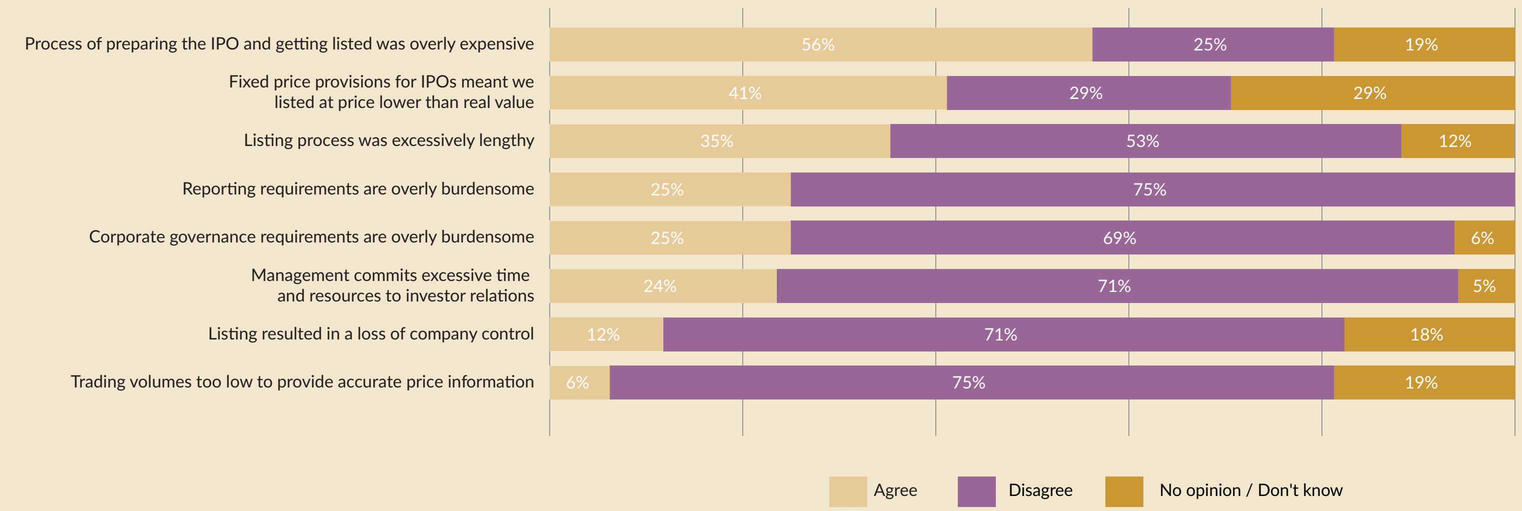
Based on your company's experience, has listing on NEPSE delivered the following benefits or not?



Source: NEPSE-Milken Institute 2019 Business Survey

CHART 5. Experience of Listed Companies: Possible Downsides of Listing

Based on your company's experience, do you agree or disagree with the following statements on the possible downsides of listing?



Source: NEPSE-Milken Institute 2019 Business Survey

THE STOCK MARKET AND SME FINANCING: "MOVING DOWN THE CHAIN"

Increasingly, one source of new listings for stock exchanges in advanced and developing markets has been innovative SMEs with the potential for rapid, sustained growth. For exchanges, successfully attracting high-growth SMEs creates new business, contributes to long-term profitability, and helps attract a more diverse set of investors. For the SMEs themselves, capital market solutions such as an equity listing can potentially provide an alternative to bank financing and facilitate access to long-term funding. For the wider economy, alternative financing avenues for SMEs help fund innovative enterprises that drive job creation and increase productivity.

In Nepal, where SMEs account for about 60 percent of national employment, participants argued that a lack of access to finance has impeded SME expansion. According to one participant, Nepali SMEs "are getting older, but they are not growing." He explained, "Part of the issue is investment. Where is the investment coming from? Access to finance is a key constraint."[11] Since banks, as discussed

11 According to IFC estimates, the SME financing gap in Nepal was around US$3.6 billion in 2017. See "MSME Finance Gap: Assessment of the Shortfalls and Opportunities in Financing Micro, Small, and Medium Enterprises in Emerging Markets," IFC (2017).

above, do not appear to be effectively serving the needs of SMEs in Nepal, several roundtable participants questioned whether the NEPSE could or should do more to help close the SME financing gap. In particular, they explored the possibility of establishing a specialized market segment for SMEs on the NEPSE.

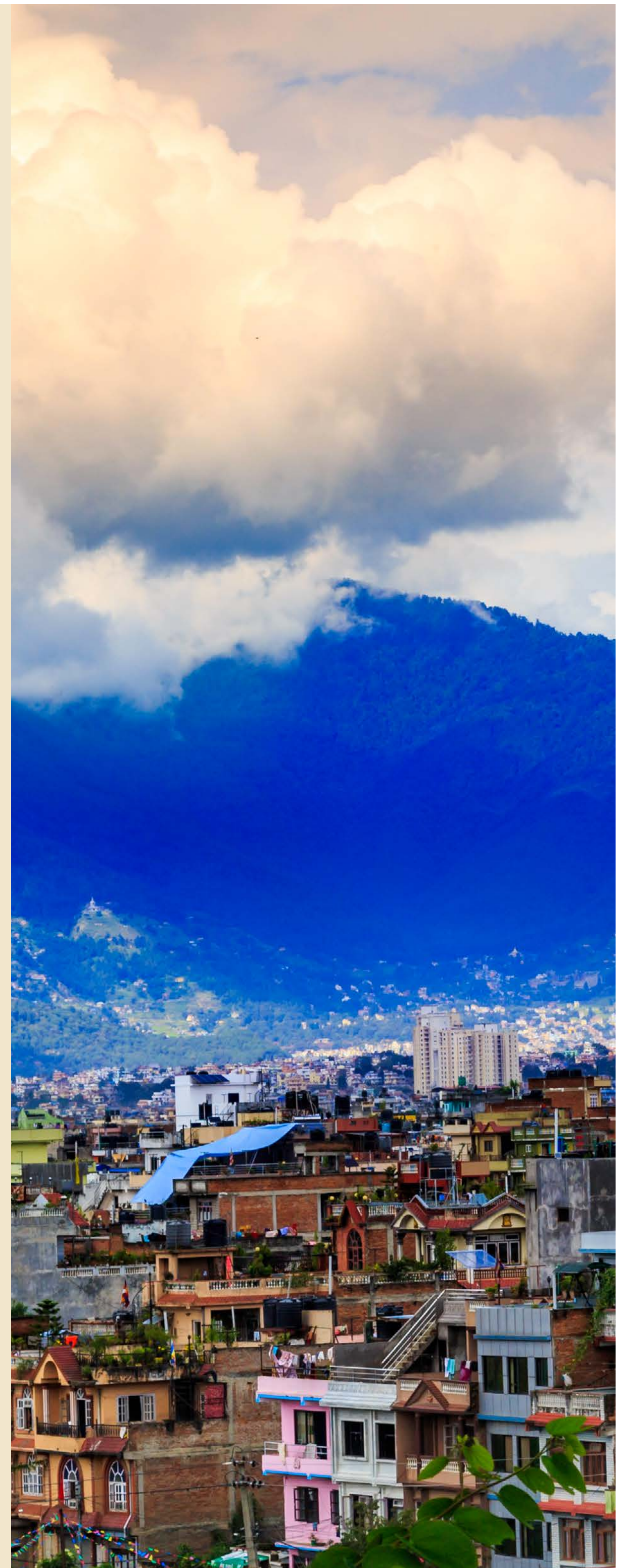
Still, developing capital markets solutions for SMEs will require improving the overall information environment, including improving accounting and financial reporting standards among firms. In a weak information environment, relationship-based bank lending typically predominates because banks specialize in long-term relationships with clients they know personally. Capital markets, on the other hand, can only develop when investors have access to the timely, detailed, and accurate data required to invest in long-term debt securities or take an ownership stake in a company. As discussed in Box C below, roundtable participants discussed one innovative approach to financing SMEs and improving the overall information environment—namely, the private placement platform that the Maldives Stock Exchange is launching.

BOX C. An Alternative Model: Creating an Online Private Placement Platform

The Maldives, an island nation located in the Indian Ocean, is Asia's smallest country in landmass and population. The Maldives Stock Exchange (MSE), established in 2008, has eight equity listings, with a market capitalization of about US$1 billion. As one participant from the Maldives explained, the leadership at the exchange was tired of waiting for companies to "grow, prosper, and come take advantage of the capital market," and so they "decided to move down the chain." The MSE's management tasked a team of young software developers to build an online platform for the private placement of corporate debt that would be managed by the MSE and use its back-end market infrastructure.

The main idea of the platform is to offer growing SMEs an alternative to bank financing. As this participant explained, firms have the flexibility to input what they believe will be a marketable interest rate, to determine the maturity of the security (which can range from five to 15 years), and to choose what collateral, if any, to pledge. Then, this participant continued, "the security is vetted through the platform by the regulator and pitched to a pool of investors. This pool of investors makes their own risk assessments, and then they decide whether they want to invest or not." The exchange is targeting accredited retail investors, banks, and institutional investors, and the recently established SME Development Finance Corporation, a specialized government financial institution, to help finance SMEs in key economic sectors.

In the long term, according to this same participant, the MSE leadership believes the platform will contribute to more capital market development in a couple of ways. First, it will help dynamic young firms grow and mature while also introducing them to the potential of raising funds via the exchange. The hope is that they will one day list shares. Second, the data generated by the platform and improved financial reporting of issuers will help improve the overall information environment.



Should the NEPSE Create an SME Segment?

Over the last two decades, many stock exchanges worldwide have established dedicated SME segments with special listing rules that allow smaller firms to list shares under a reduced fee structure and with less burdensome ongoing listing requirements, often with authorized intermediaries guiding them through the process. In most cases, these firms eventually "graduate" to the main market. It is uncertain, though, whether such an approach would be appropriate in Nepal, as the track record of these segments has been mixed in developing countries. In some markets, such as India, Poland, and Thailand, they have performed well. In others, such as Kenya and the Philippines, SME market segments have never attracted more than a handful of listings, despite the deployment of significant resources to bring firms to the market.[12]

A survey of global experiences with SME segments, one roundtable participant said, suggests that four conditions are required for this approach to succeed. First, there needs to be a large base of growing SMEs.[13] Second, the main market of the stock exchange needs to be functioning well before the SME market is established. Third, there needs to be a long-established equity culture in the country so that business owners understand the potential value of a listing. Fourth, since most investment in SME markets comes from retail investors, there needs to be a large enough base of retail investors who are also comfortable risking their capital on smaller, unproven firms. The same participant urged the NEPSE to study whether these prerequisites were in place before expending the energy and resources to establish an SME segment.

REGULATORY BARRIERS TO ATTRACTING NEW LISTINGS

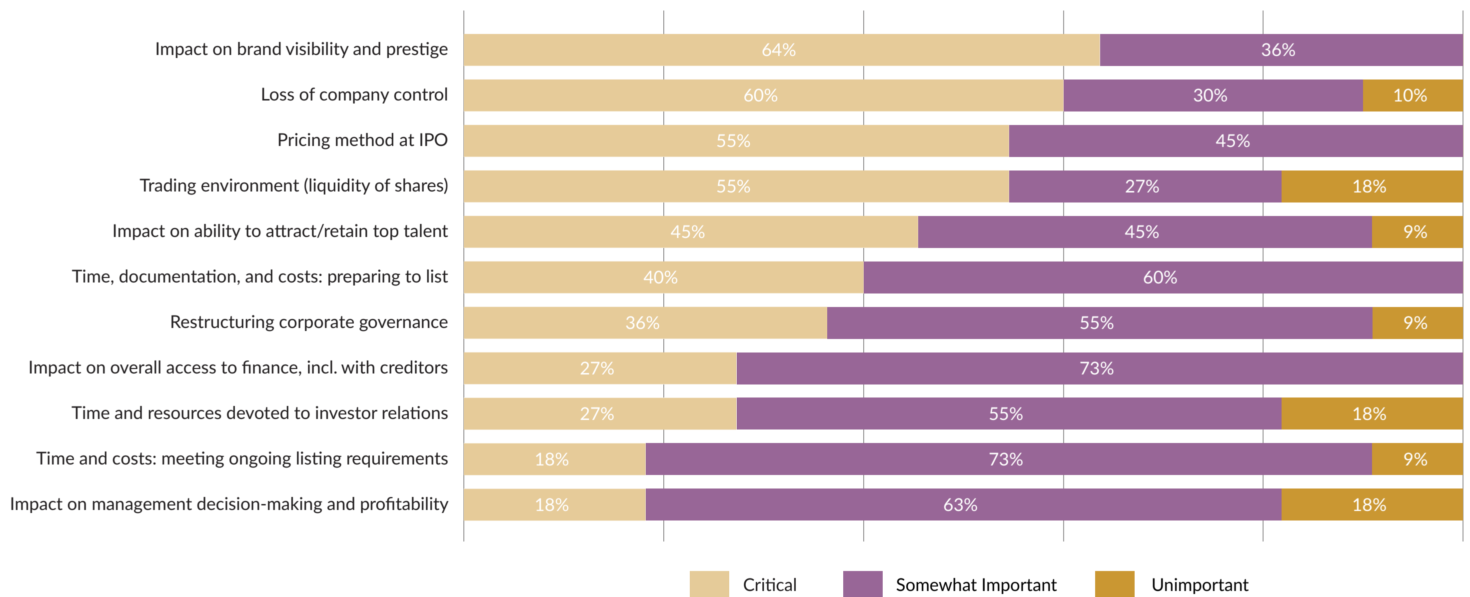
While much of the discussion focused on what the NEPSE could do to attract new listings, roundtable participants also stressed that the current regulatory environment disincentivizes some companies from pursuing a public listing. In particular, as discussed in detail below, they highlighted the IPO pricing cap imposed by the Securities Board of Nepal (SEBON) as the most important hurdle to address. They also identified a three-year lock-up period for foreign private equity investors as an additional barrier.

12 For more on SME market segments, see Siobhan Cleary, Stefano Alderighi, Jacqueline Irving, and Jim Woodsome, "Small and Medium-Sized Enterprises and SME Exchanges," Milken Institute-World Federation of Exchanges (July 2017); and John Schellhase and Jim Woodsome, "SMEs and Public Equity Financing: A New Dataset of SME Boards in Emerging-Market and Developing Economies," Milken Institute (August 2017).

13 Both the Bombay Stock Exchange and National Stock Exchange in India have been able to launch successful SME segments because of the massive numbers of new firms the large Indian economy can support.

CHART 6: Unlisted Firms that Had Considered a Listing: Factors Affecting their Decision

How important are or were the following factors as your company deliberated whether to list or not?



Source: NEPSE-Milken Institute 2019 Business Survey

The IPO Pricing Cap

Participants identified the current method of pricing shares issued through an IPO as the most severe regulatory obstacle to attracting new NEPSE listings. SEBON presently caps the valuation of a company that wants to IPO at a maximum of four times the book value of a company's assets.[14] In other words, the maximum IPO share price is not determined by market forces but by what one Nepali roundtable participant called "an arbitrary formula."

Survey results underscore how important this barrier is for listing on the NEPSE. All surveyed companies that had considered listing (but decided not to) said that the IPO pricing method was important to their decision. Over half—55 percent—said it was critical. Additionally, 41 percent of participating listed firms said that this provision meant that their companies listed at a lower price than they believed their company was worth. "Extrapolated," one roundtable participant said, "this number means that out of the 200 listed companies on the NEPSE, perhaps 80 listed at a value lower than the market would have paid."

There are two implications of these observations. First, if private owners cannot get a fair price from the market, the NEPSE has lost one of its key selling points. Second, the pricing cap limits the kinds of companies that will want to come to the NEPSE. As one roundtable participant explained, "If I have an airline company that owns all its airplanes, four times book value would be fantastic, but when a tech company is growing exponentially and only has a few laptops, the real valuation is probably thousands of times book value." He continued, "Essentially, what the cap does is stop every technology company in the country from listing."[15] As a corollary, it also disincentivizes investors from investing in innovative, potentially high-growth companies in the first place, because the potential for high returns is needed to justify the initial risk in these as-yet unproven firms.

Several roundtable participants expressed their hope that SEBON would act quickly to reform the IPO pricing guidelines. They argued that the regulatory environment should enable and encourage firms to use a book-building process to determine the IPO share price.[16] If SEBON would allow book building, one participant said, "it

14 For valuations between one and four times book value, SEBON relies on market-based valuation formulas. However, most companies that have listed on the NEPSE have done so at par—that is, the valuation of the company has been equal to the book value of the company's assets—but it is worth noting that almost all of these companies are banks and financial institutions that came to the market because of regulatory mandate.

15 As an example, he pointed to the startup CloudFactory, which has seen annual revenues grow from US$5 million to US$24 million in a few years, but which is considering listing outside Nepal because of the IPO pricing cap.

16 For international guidance on regulatory issues affecting the pre-IPO stage of equity fundraising, see "Conflicts of interest and associated conduct risks during the equity capital raising process," IOSCO (September 2018).

would mean that for the first time issuers and investment banks could price the IPO according to what they really perceive is the enterprise value of the business." As another participant said, "In well-functioning markets, investment banks are fighting to take companies public," but this is not the case in Nepal because IPO share prices are not market-driven.

According to one senior-level roundtable participant, SEBON is aware of this issue and may be ready to reform the IPO regulations. However, he added, concerns about the sophistication of retail investors (an issue explored in the section below) may delay these changes. Due to the pricing cap, investors have become accustomed to essentially buying shares at a discount at IPO and then seeing prices quickly increase to match the long-term value of the company. Within SEBON, this participant said, there is a belief that "we need to educate the investors first, so that they'll know they cannot always get every IPO at a share price of rupee 100 [that is, at a valuation equal to the book value of fixed assets]. That's a dilemma, and that's why it's taking a bit of time." Still, this participant noted that the merchant banking and institutional investor sectors in Nepal have developed significantly since the current regulations were issued and that the thinking in the regulator may be changing.

"Blocking the Exit": The Three-Year Lock-up Period for Foreign Private Equity Funds

An additional regulatory barrier to new listings is a three-year IPO lock-up period imposed on foreign private equity investors that list their companies on the NEPSE. Lock-up periods are typically contractual clauses that prevent founders and early-stage investors from quickly selling their ownership positions after an IPO.[17] While lock-up periods are common around the world, they normally only last for 90 or 180 days. Also, it is unusual for them to be imposed by regulation. Normally, they are a contractual feature included in the IPO documentation by the company that is listing or by the investment bank managing the issuance.

Nepal's long lock-up period for a foreign private equity fund is a barrier to new NEPSE listings because it makes exiting via an IPO unattractive to these funds. As one participant who manages a fund explained, a private equity fund typically operates under a 10-year timeframe. The normal life-cycle is to start investing in years three or four, help portfolio companies grow for about four years, and then spend the last two years exiting from positions, including through listing companies on the stock exchange. Then, at the end of the cycle, the fund is required to return earnings to its investors. A three-year lock-up period makes this timeframe unfeasible, and therefore funds will look for alternatives to an IPO to exit.

17 This restriction protects public buyers from sudden drops in share prices caused either by a large offloading of shares or the perception that the private owners lack faith in the long-term profitability of the company.

To address this barrier to NEPSE listings, one participant recommended amending the regulations for foreign investors so that they would have the same one-year lock-up period imposed on Nepali early-stage equity investors.[18]

From a broader perspective, if investors determine that exiting from early-stage investments will be burdensome, they will be less likely to deploy capital in Nepal in the first place. As one participant explained, in many markets worldwide, an IPO is the end-point of the entrepreneurial growth cycle that begins with venture capital investments. "When international private equity funds look at Nepal," this participant said, "and see a three-year lock-up period, and if they're a 10-year fund, they probably will not enter the market, because adding three years to the end of the fund's life cycle is too risky. It basically blocks your exit."[19] Summarizing this view, another participant said, "Blocking exit means blocking entry." For Nepal, this dynamic could mean that worthy, innovative young firms may not be able to access the capital they need to develop and grow their companies.

ATTRACTING INVESTORS

Alongside the discussion of persuading more firms to issue shares, roundtable participants also explored how the NEPSE could further expand its investment base. As captured below, roundtable participants discussed how the NEPSE might deepen the participation of domestic retail investors by widening the geographic reach of brokerage services, expanding the use of collective investment vehicles such as mutual funds, and improving financial markets literacy.

However, the roundtable discussion stressed that the NEPSE should not rely on retail investors alone, but should work to attract additional institutional investment. Institutional investors such as pension funds and insurance companies are an important source of long-term funding for public-sector and corporate investments that contribute to economic growth because their investment decisions are informed by their need to meet long-term liabilities, their fiduciary responsibilities to beneficiaries, and their employment of professionally trained fund managers. In these ways, institutional investors can balance the investing patterns of retail investors, who are often less sophisticated, more speculative, and more focused on short-term returns.

18 Arguably, the one-year lock-up period for local investors could also be reduced to a timeframe closer to the global norm of 90 to 180 days.

19 While this barrier likely affects fewer firms that the others, according to one roundtable participant, the main foreign private equity fund operating in Nepal has at least five companies "that would typically come to the market," if not for the combination of IPO pricing cap and the lock-up period.

In Nepal, the local institutional investor base is still at a nascent stage of development, and their participation in NEPSE trading, according to one participant, is "negligible." The roundtable discussion, therefore, emphasized the importance of attracting foreign institutional investment while also developing the domestic institutional base.

DEEPENING DOMESTIC RETAIL PARTICIPATION IN THE NEPSE

Almost all investment in the stocks listed on the NEPSE comes from retail investors. However, this is a shallow investment pool for the market. While nearly 1.7 million Nepali citizens (or about 6 percent of the population) have a registered Demat account,[20] this number suggests a higher amount of retail investment activity than there is. According to one roundtable participant who manages a stock brokerage, only around 200,000 investors are actively trading in the secondary market.[21]

Roundtable participants recommended two complementary approaches to expanding domestic retail participation in trading on the NEPSE. First, they argued to widen the geographic scope of brokerage services in Nepal. Second, they called for the further development of collective investment vehicles designed for retail investors. In both cases, roundtable participants emphasized that expanding retail investment in the NEPSE should be paired with increasing financial markets literacy.

20 See "Quarterly Securities Market Indicators (Mid-Jan to Mid-April, 2019)," Issue 9, SEBON (2019).

21 Most Demat account holders, this participant argued, registered to participate in an IPO, taking advantage, perhaps, of the fact that the pricing caps often mean firms effectively issue shares at a discount.

Overcoming Geography

Expanding the number of retail investors will most fundamentally mean widening the geographic reach of brokerage services, according to several roundtable participants. As one participant explained, Nepal's 50 brokerage firms are all headquartered in Kathmandu, and there are only a few offices located in other municipalities around the country. "People have to travel a long time to buy and sell shares," he said, and this reduces the amount of trading on the NEPSE.

One straightforward way to address this barrier might be to use existing bank networks. Banks, one participant argued, are well-positioned to provide brokerage services because they "have 4,000 branches spread from the most rural areas to the most urban centers," enjoy high levels of public confidence, and have experience introducing the public to new financial products. For these reasons, he said, SEBON and the NEPSE "must give banks brokerage licenses." However, as other participants noted, there is a reasonable concern that heavily involving banks in expanding brokerage services could increase the concentration risks described in Part I, given that bank stocks dominate NEPSE listings.

Other participants suggested that technology could overcome geographic barriers. Some highlighted the 2018 launch of the NEPSE Online Trading System (NOTS), which allows Nepali investors to make trades through an online portal from anywhere in the world, as a positive step for including more rural investors. Another participant recommended building a NEPSE mobile app so that "investors have direct access to trading facilities through their mobile phones," potentially allowing investors to bypass the brokerage office altogether. Amplifying the potential for mobile trading, one Nepali participant noted that 70 percent of trades on the Mercantile Exchange-Nepal, the national commodities exchange, now occur via a mobile app.

Others, though, cast doubt on relying on technology to reach investors outside urban centers. A few participants said that even at current trading levels, the NOTS system has experienced technical glitches that delay order processing and has sometimes displayed incorrect stock prices (though, one participant responded, many of these problems have been resolved). According to another roundtable participant, "If we are planning to reorganize our trading rules and if we are planning to have more instruments in the market, I don't think we can go very far with the current system." In addition, only around 65 percent of the Nepali population is online, and most internet users are clustered in urban areas. Even for those with internet access, making trades online requires a level of technical and financial literacy that arguably excludes many individuals.

New Retail Products

Another important way to increase retail participation in the public equity market is to expand the adoption of retail products and better tailor them to the needs of Nepali savers. Retail investment products that operate as collective investment schemes, such as mutual funds and unit trusts, pool the funding of many individuals to invest in a diversified portfolio of securities. Though mutual funds exist in Nepal, there was general agreement that this kind of product offering should be expanded. Such products, one participant said, "would bring in a lot of excitement and liquidity in the market," and they "are especially important when the capital market is poised for growth."

Retail investment products have the added benefit, a couple of participants said, of expanding financial market literacy among the general public because distributors, particularly banks, explain concepts such as rate of return and risk management through diversification as part of their marketing process with clients.[22] As one stock exchange executive from the region said, "Building financial literacy among a retail investor base is a prerequisite before you start pushing shares, and our strategy has been to direct those retail investments through unit trusts or mutual funds."

Expanding Financial Market Literacy

The roundtable discussion underscored that investor education serves two broad purposes. As one roundtable participant explained, it serves "partly to protect them, but also partly to encourage them to participate." In terms of protection, roundtable participants stressed that retail investors need to understand the risks—and potential losses—of equity investments. As one participant said, "It is very important that we build a base of retail investors who are savvy about the fact that capital market investments carry certain risks. They need to understand the risks, and they need to be able to manage risks."

To increase participation, several roundtable participants highlighted the importance of educating investors about the potential upside of investing. "We should be teaching people compounding," one participant said, as he shared market data about the exceptional performance of several NEPSE-listed firms. Another participant argued that educating the general population about the potential gains of public equity investing could mobilize savings now stored in jewelry, land, or cash for investment that could contribute to economic growth.

More broadly, roundtable participants generally agreed that increasing the public's understanding of financial markets would also contribute to better financial market

22 Participants noted that in India and Sri Lanka collective investment vehicles have helped build a wider, more knowledgeable retail investor base.

policymaking. For example, as noted above, concerns about the sophistication of retail investors have delayed reforming the IPO pricing regulations, according to one roundtable participant. More indirectly, in a democracy, the level of public financial literacy also affects which issues elected officials and political appointees prioritize.

Given its importance, the discussion shifted to who should lead the efforts to improve literacy. "The answer has to be everyone," one participant said. "It is incumbent on all participants in the market—regulators, the exchange, brokers—to work on increasing the sophistication of investors." In particular, several participants emphasized the role brokers could—and perhaps should—play in improving financial markets literacy. "If you want to sell products to investors," one participant said, "you should be willing to educate them." As a model for brokers, one participant recommended studying the successes of the Nepali banking sector and the National Banking Institute in improving financial literacy, a model which he believed could be replicated for the equity market. As for the NEPSE's role, one participant recommended the Bombay Stock Exchange as a potential model. The BSE holds around 2,000 investor educational events each year, and while the Indian market is far larger than Nepal's, this participant believed the NEPSE could learn from the BSE's approach. Finally, one participant recommended that SEBON participate in the International Organization of Securities Commissions (IOSCO) World Investor Week, an international event to promote financial literacy through targeted media campaigns and investor workshops.

OPENING TO INTERNATIONAL INVESTORS

While retail investors are a crucial component of the NEPSE's investor base, the savings within Nepal will almost certainly not be enough to meet the capital investment needs of the economy. Instead, Nepal will increasingly need to open to foreign direct investment as well as to foreign portfolio investments in publicly traded securities.[23]

For the NEPSE, roundtable participants acknowledged, this would be a dramatic change. Although recent legal reforms lifted a ban on foreign investment, there were no foreign investors holding NEPSE-listed shares at the time of the roundtable.

23 Internationalization is a driver of capital market development according to a recent report from the Bank for International Settlements (BIS) cited at the roundtable. The BIS authors write that international investment contributes to market development by deepening the pool of available savings; diversifying the investor base in that "the circumstances, needs, and expectations of foreign investors and issuers may differ from those of local investors;" and promoting "the implementation of international best practices and standards" in developing markets. See "Establishing viable capital markets," BIS (January 2019). Note that while the roundtable discussion focused on attracting foreign investment, the BIS authors use "internationalization" to refer to "[o]pening up access to international investors and issuers, and allowing domestic firms and investors greater opportunities to issue and invest abroad." The World Federation of Exchanges (WFE) identifies similar benefits to opening markets to foreign investors in its study, "What attracts international investors to emerging markets?", WFE (December 2018).

Opening the Nepali capital markets will likely require sustained political will. As an example of how another South Asian country had successfully opened to international investment flows, roundtable participants pointed to the experience of Sri Lanka, a market similar in size and sophistication to Nepal that has effectively increased international participation. There, as one participant explained, "The government was very committed to opening up to foreign investment. The move towards liberalization was led by the government itself, and the president of the country appointed a special minister to be in charge of the project." As a result of Sri Lanka's reform efforts, about 50 percent of investment in the Colombo Stock Exchange (CSE) now comes from foreign investors.

In addition to high-level political buy-in, the CSE has identified five crucial "success factors" for attracting foreign investment:

1. **Simplify the process for opening an account:** Sri Lankan officials eliminated red tape for bringing money into and taking it out of the country.

2. **Encourage the entry of foreign banks:** The presence of international banks facilitates the entry of foreign funds and also provides investors with ongoing services they feel comfortable with as they manage their money in Sri Lanka.

3. **Minimize the tax burden:** Sri Lanka does not impose capital gains taxes on foreign investors, though the government does impose a minimal transaction fee.

4. **Fully adopt IFRS accounting standards:** The CSE required all listed companies to adopt the International Financial Reporting Standards (IFRS). These internationally recognized standards for financial statements increase foreign investors' confidence in the information they are receiving and facilitate research on CSE-listed firms.

5. **Implement a strong corporate governance policy:** The regulatory framework requires compliance with strong corporate governance and disclosure standards and establishes clear consequences for violations of these rules.

A roundtable participant from Sri Lanka credited these steps with catalyzing market development in his country. "When we opened up to foreign investment," he said, "it changed the game. From then onward, we really experienced phenomenal growth in the market," to the point that Sri Lanka was briefly included in the MSCI Emerging Market Index.

But opening to foreign investment is not without risks: it exposes the market to sudden inflows and outflows of capital. One participant from a South Asian market said, "Foreign money is important for any country to really grow. Nepal, like many other countries, may have one problem: managing hot money. So when you are forming your foreign investment policy, you have to ensure that whatever comes into the country will not go away overnight, because it can create chaos in the economy."

Even Sri Lanka has now been reclassified as a frontier market. According to one roundtable participant, this setback reveals the potential risks involved in relying heavily on foreign portfolio flows. Another participant said that the lesson his country took from Sri Lanka's experience is that attracting foreign investment needs to be paired with developing the domestic investor base. Local institutional investors balance the sudden stops and starts of international flows, reducing volatility and sustaining liquidity in the case of sudden outflows.

At the same time, though, a participant from Sri Lanka noted that international investors can also balance domestic volatility. The presence of foreign investors, he said, has buoyed the CSE during an extended period of domestic turmoil. "It has been the foreign investors who have been driving the market," he said, "giving us the volume and giving brokers their revenues." He pointed out that even after the horrific Easter Day terrorist attacks in 2019, there was a net foreign inflow of investment into Sri Lanka. "Foreign investment," he said, "has advantages." He added, "If Nepal is going to have a transformation, the way to go is to open up to foreign investors."

IMPROVING THE TRADING ENVIRONMENT AND INCREASING LIQUIDITY

Attracting new issuers and new investors will be essential to increase trading activity and make the NEPSE a more dynamic market. But the reverse is also true: an improved trading environment and a more liquid market would help attract new issuers and new investors. According to the roundtable discussion, achieving this virtuous circle will require progress across three interrelated priorities: ensuring market integrity, improving market infrastructure, and enabling the further development of the ecosystem of market intermediaries.

Progress in these areas—each of which is discussed in detail below—would contribute to increased liquidity on the NEPSE, benefitting both issuers and investors. For issuers, liquid securities markets can reduce the cost of capital, increasing the attraction of listing on the exchange. Liquid markets also provide real-time information on how investors perceive the value of listed companies, which, over time, can improve managerial decision-making and firm productivity. For investors, liquidity lowers trading costs and reduces the risks of investing by enabling investors to exit from positions quickly. Illiquid markets, by contrast, discourage investment because without sufficient trading activity, investors cannot quickly exit from a position at a fair price.[24]

With a daily turnover volume of about US$5 million, the NEPSE is a fairly illiquid market. While one South Asian stock exchange executive said, "On liquidity, there is no quick win for markets like ours," another noted that the NEPSE's annual turnover ratio of about 8.5 percent of market capitalization is much lower than other South Asian markets. For example, the annual turnover ratio is about 29 percent in Pakistan and about 50 percent in India, according to data from the World Federation of Exchanges.[25] These figures represent potential targets for the NEPSE as the exchange considers implementing the recommendations highlighted below.

ENSURING MARKET INTEGRITY

A first-order priority for any stock exchange is ensuring the integrity of the market. Corrupt markets can mask risks that can worsen the effects of economic crises, while stock price manipulation and insider trading also heavily disincentivize investor participation. In Nepal, according to the roundtable discussion, there are serious concerns about the integrity of the securities markets. One participant explained how these issues impede efforts to attract retail investment:

> *We know there is insider trading happening in our market, but we simply turn deaf ears and blind eyes to it, saying we don't have very good rules to monitor, to identify, and to penalize insider traders. What happens then is that small investors believe they are being cheated by someone else in the market, cheated by people who are financially and informationally more sound than them. When these small investors exit the market with this bitter feeling, it takes a lot of effort to bring them back, and so this also will dampen the liquidity and turnover in the market.*

24 From a broader angle, liquidity is one of the main mechanisms through which stock exchanges contribute to economic development. As economists Ross Levine and Sara Zervos have written, "[S]tock market liquidity—the ability to trade equity easily—is important for growth. Specifically, although many profitable investments require a long-run commitment of capital, savers do not like to relinquish control of their savings for long periods. Liquid equity markets ease this tension by providing an asset to savers that they can quickly and inexpensively sell." See Levine and Zervos, "Stock market development and long-run growth," Policy Research Working Paper, World Bank (March 1996).

25 In Organization for Economic Cooperation and Development countries, the average stock market turnover ratio is around 100 percent.

The NEPSE should also, according to the discussion, consider developing internal structures that help it better fulfill its quasi-regulatory role. As one roundtable participant explained, by establishing listing standards, participating in the licensing of brokers, and surveilling market behavior, the exchange has "essentially been deputized by the regulator." The regulator gives the exchange these duties, this participant added, because "the people who are best placed to do the initial surveillance—and to also take on the cost of the initial surveillance—are closest to the market and most knowledgeable about the market." Accordingly, several participants argued, the NEPSE should establish stronger internal boundaries between the profit-seeking and quasi-regulatory functions of the exchange.

The "separation of functions" within the departmental structure of exchanges was commonly instituted worldwide after the global financial crisis.[26] Within the South Asian context, one participant highlighted the Dhaka Stock Exchange as one positive example. There, the regulatory affairs division, which manages the exchange's supervisory functions, is led by a chief regulatory officer who operates independently of the CEO and has a separate reporting relationship with the board of directors.[27] According to the roundtable discussion, ensuring this division operates without interference from the exchange's commercial interests is fundamental for maintaining public confidence in the market.

A more specific concern is that prices do not reflect new market information in certain circumstances. "Whenever a significant corporate event happens," one participant said, "such as a merger or acquisition, or whenever the circuit breaker is activated, we start trading again with the same price as before the occurrence of such events." The exchange, he argued, should reexamine current rules so that material information remains incorporated into the price once trading recommences.

IMPROVING MARKET INFRASTRUCTURE

More sophisticated market infrastructure could contribute to ensuing market integrity through improving surveillance and prosecuting market abuses, according to some roundtable participants. One called on the NEPSE to invest in systems that include the forensic capacity to examine trading databases and, in the course of an investigation, verify if people with potential conflicts of interests make suspiciously advantageous trades before material information was made available publicly.

26 For an exploration of how some of these issues affect governance structures in larger markets, see Hans Christiansen and Alissa Koldertsova, "The Role of Stock Exchanges in Corporate Governance," Financial Markets Trends, Vol. 2009/1, OECD (2009).

27 The division has six departments: surveillance; monitoring and compliance; investigation and enforcement; listing affairs; investor complaints, arbitration, and litigation; and corporate governance and financial reporting compliance.

At a more fundamental level, the NEPSE will need to modernize its market infrastructure to process increased trading demands. According to one roundtable participant, the Nepali securities market currently “does not have the infrastructure to assure the completion of transactions.” Instead, he said, clearance depends on “the honesty and integrity of the brokers.” Part of the problem is that Nepal does not have a separate clearing corporation, so the depository acts as a clearinghouse. This arrangement can delay the completion of transactions because, according to this roundtable participant, the broker dealers who act as clearing members sometimes fail to act in a timely way. The uncertainty and informality of this system, this participant observed, is likely to curb foreign investment, even if other efforts are made to open the market.

FURTHER DEVELOPING THE INTERMEDIARY ECOSYSTEM

Roundtable participants stressed that increasing market liquidity would require further developing—and improving the trading environment for—the ecosystem of market intermediaries that serve retail investors. With this aim, one participant who manages a stock brokerage firm in Kathmandu presented a series of priorities for the NEPSE and, in some cases, SEBON that generated strong consensus among other participants. These priorities included several ideas discussed above, such as expanding the geographic reach of intermediaries serving Nepali retail investors, but went beyond them to address the need for market-makers within the Nepali financial ecosystem, opportunities to provide intermediaries with more price information, potential reforms to trading rules, and the need to expand the scope of activities brokers are permitted to undertake.

Perhaps the most fundamental of these priorities was the need to establish market-making intermediaries in Nepal. By always being available to buy or sell stocks, market makers and dealers overcome the problem of buyers and sellers reaching the market at different times. Given that the Nepali market does not have such licensed intermediaries at present, the participant who led this discussion urged regulators to begin the requisite regulatory consultation and reform process. He argued that the market would need, eventually, to be served by several market-makers and dealers.

Improving the information environment and allowing additional trading strategies will also be crucial to increasing trading on the NEPSE. One participant recommended exploring ways to increase price transparency during pre-open hours, by showing, for example, the best bids to excite the interest of traders and generate activity early on that extends throughout the day. Other participants argued for more significant changes to the trading rules. In particular, they recommended that SEBON and the NEPSE reconsider prohibitions against intraday trading and short selling. As one acknowledged, short selling “is not always desirable but plays a very important role in creating liquidity and in avoiding unnecessary bubbles in the market.” Taking up this point, another participant suggested allowing short selling within set limits (such as requiring all short positions to be closed by the end of the trading day), to reduce potential long-term risks to market stability.

Finally, several participants believed that brokers should be allowed, even encouraged, to expand the scope of services they offer investor-clients beyond simply executing trades. In particular, one participant said, brokers should be encouraged to introduce “more value-added products such as research and investment advice.” Such activities would help increase the sophistication of at least some retail investors. They would also provide new revenue streams for brokers, potentially resulting in lower fees for order execution for their clients.

PART THREE

Ownership, Governance, and Regulation

There was broad consensus at the roundtable that reforming the current ownership and governance structure of the NEPSE would help the exchange achieve many of the goals identified above. At present, the exchange is a state-owned enterprise governed by a seven-member board, with only a single independent director. Roundtable participants argued, though, that government divestment would clarify institutional roles and enable the NEPSE to more independently and effectively pursue its mandate while also increasing market confidence in the exchange's management. Likewise, they recommended reconfiguring the NEPSE board of directors to include more independent directors with capital markets expertise. In addition to strengthening NEPSE’s governance, roundtable participants widely agreed that the securities regulator, SEBON, needed greater independence from the Ministry of Finance as well as further investments in staffing and human capacity.

REFORMING THE NEPSE'S OWNERSHIP STRUCTURE

The ownership structure of a stock exchange impacts the development of public equity markets for three main reasons. First, it affects how costs and profits are distributed among market participants. Second, it affects market confidence in the exchange's management and their decisions. Third, it has implications for the exchange's ability to raise capital and make investments.

Since its founding in 1993, the NEPSE has been a state-owned enterprise. The government of Nepal holds 59 percent of NEPSE shares and exercises its influence through the Ministry of Finance (MOF), while the NRB owns a 35 percent stake, and a state-owned bank owns another 6 percent. Less than 1 percent of shares are held by private organizations (the exchange's broker members). According to the roundtable discussion, government divestment from the NEPSE will need to be an integral component of wider efforts to develop Nepal's capital markets.

The central argument roundtable participants made for privatization is that it would help clarify institutional roles. Given that the value proposition of equity capital is to enable productive corporate risk-taking, it follows that while some companies will succeed, others will fail, and while some investors will have strong returns, others will lose money. Accordingly, the NEPSE's primary obligation is to provide investors with a transparent, fair, and efficient trading environment for listed shares. However, according to the roundtable discussion, because the MOF and particularly the NRB have broader financial stability mandates, government ownership has slowed and sometimes stalled initiatives to modernize the trading environment and develop new products. The conflict between roles is further exacerbated, one roundtable participant stressed, because the MOF sits at the organizational apex of both the exchange and SEBON, its regulator, whose operational independence is discussed below.

Privatization would also likely contribute to increased market confidence in the exchange because it would widen the representation of market participants in the exchange's ownership beyond a narrow group—that is, beyond government agencies. To this end, several roundtable participants urged the NEPSE to avoid privatizing in a way that would lead to ownership by a small segment of market participants. In particular, they argued that limiting ownership to only licensed companies within the financial industry and listed companies might introduce additional concentration risks since about 80 percent of listed firms are banks or financial institutions. Instead, they argued the NEPSE has an opportunity to move directly to the ownership structure adopted by its regional peers through demutualization (as discussed further in Box D below), transforming from a state-owned enterprise to a joint-stock company with the potential to issue its shares to the public through an IPO.

Current regulations, however, would not allow this outcome. Under SEBON's 2008 Stock Exchange Operation Regulations, only licensed banks, financial institutions, securities businesses, and listed companies can be stock exchange owners. Roundtable participants differed on whether privatization should begin before these regulations are changed. One participant argued for quickly privatizing and addressing the ownership regulations later on. As described in the "Update" box below, this is happening, as the NRB's divestment of its ownership stake will proceed ahead of regulatory reforms. Others recommended reforming the 2008 Stock Exchange Operation Regulations and then initiating government divestment.[28] While the sale of NRB shares is moving forward, this approach could still be possible for MOF divestment.

Regardless of these differing views, participants generally agreed that the NEPSE and its government owners should decide and implement a privatization plan as soon as possible—and that this plan should ideally extend beyond NRB divestment to full privatzation.

Post-Roundtable Update: NRB Advances Plan to Divest from the NEPSE

In July 2019, after considering divestment for several years, the Nepal Rastra Bank announced a detailed plan to sell its NEPSE shares. The NRB owns a 35-percent stake in the exchange, and so this decision is a significant government divestment. It will, once finalized, remove the central bank from the ownership structure of the stock exchange, reducing the conflict of roles discussed at the roundtable.

As it relates to the immediate discussion above, the NRB's divestment is proceeding without changes to SEBON's Stock Exchange Operation Regulations. The buyers, therefore, will be either licensed financial institutions or listed companies.

GOVERNANCE AND THE NEPSE BOARD OF DIRECTORS

Strong governance for the NEPSE is essential, one participant said, because "the exchange is not just another corporate entity, but has certain responsibilities that are public in nature." Currently, the NEPSE board of directors (BOD) is comprised of seven members. Six are representatives of the exchange's government shareholders.[29] The seventh is an "independent director nominated by the BOD having expertise in the area of capital markets."[30]

28 Potentially, government shares could be offloaded directly to the Nepali public through an IPO.

29 The chairman, the CEO, and an additional member are appointed by the MOF; two directors represent the NRB; and one director is appointed by the state-owned Rastriya Banijya Bank.

30 "Nepal Stock Exchange Limited: An Introduction," Nepal Stock Exchange, (May 2019).

BOX D. Restructuring Ownership: The Regional Experience

Historically, many stock exchanges around the world were established as mutually owned brokers associations. Under this structure, the brokers are the owners, managers, and direct users of the stock exchange, which they operate as a nonprofit. The trend globally and in South Asia has been for these mutually owned exchanges to "demutualize," transforming themselves into for-profit, joint-stock companies, owned by shareholders, managed by executives selected by a board, and with the brokers still as the main direct users. Since 2005, exchanges in Bangladesh, India, and Pakistan have demutualized, and in Sri Lanka, the Colombo Stock Exchange is currently finalizing its demutualization process.

According to several roundtable participants, one of the main purposes of demutualization is to increase market confidence by ensuring that the exchange's owners represent a wider group of market stakeholders, not just the narrow group of brokers. In the case of the Dhaka Stock Exchange, the decision to demutualize followed two market crashes, in 1996 and 2010/11, both caused by stock price manipulation by market insiders. The 2010/11 crash, in particular, catalyzed reform, one roundtable participant explained, as policymakers and market participants "were pushed to rethink how the capital markets should be organized." According to another roundtable participant from Sri Lanka, the demutualization of the CSE is motivated largely to address concerns that the exchange mainly serves its broker owners, not the wider market.

The need to represent a wider group of stakeholders is what motivates various rules about ownership structure as well as the ambition of self-listing. While "there is no best model," according to one roundtable participant, and "the structure of ownership depends on the local environment," both the DSE and CSE have capped the total amount of shares brokers can own at 40 percent and have said no single individual or organization can hold more than 5 percent of shares, with the exception of a strategic investor.[31] The legal environments in both Bangladesh and Sri Lanka also now allow stock exchanges to issue shares to the public, and both the DSE and CSE may follow the trail blazed by the Pakistan Stock Exchange in 2017 when it became the first self-listed stock exchange in South Asia.

An additional argument for government divestment that closely follows from the discussion above is that transforming the ownership structure would transform the composition of the board, as new private shareholders would elect directors from the private sector. This change would help the NEPSE pursue its mission more independently from the government's broader financial stability mandates and would more fully link the exchange's sustainability to its profitability. As a result, the NEPSE's board would be more likely to make decisions about marketing to new issuers, developing new products, and making future investments in the online trading system based on business rationales.

31 Many stock exchanges have reserved some percentage of ownership for a strategic investor, typically a foreign corporate buyer and often another stock exchange. For example, the DSE has sold a 25 percent stake to the Chinese consortium that owns the Shenzhen Stock Exchange and Shanghai Stock Exchange. The motivation for this kind of deal is to transfer governance capability and technical skills from more advanced to developing markets.

Table 2. Comparing the Board Composition of South Asian Stock Exchanges

Nepal Stock Exchange	• Five shareholder directors (two appointed by the MOF, including the chair; two appointed by the NRB; and one appointed by Rastriya Banijya Bank) • One independent director • The CEO (also appointed by MOF)
Bombay Stock Exchange	• Two shareholder-elected directors • Six public interest directors, including the chair • The managing director
Dhaka Stock Exchange	• Five shareholder-elected directors, including one appointed by the exchange's strategic investor • Seven independent directors • The managing director
Pakistan Stock Exchange	• Seven shareholder directors • Seven independent directors, including the chair • The managing director

Source: Exchange websites

Beyond shareholder-elected directors, several roundtable participants argued that the NEPSE should expand the number of independent directors on its board. These participants contrasted the NEPSE's board composition with that of other South Asian exchanges, noting that other exchanges emphasize the role of independent directors much more extensively. In Bangladesh, for example, at both the DSE and Chittagong Stock Exchange, independent directors comprise the majority of the board, as per regulatory mandate. Likewise, in India, the majority of the board must be comprised of "public interest" directors. In all cases, independence means, at a minimum, that the appointee is not an employee of any shareholder; must not have recently been employed by the exchange, its subsidiaries, or its holding company; and must not have recently served on the board of a market intermediary such as a merchant bank or brokerage firm. Independent directors that meet these criteria contribute to strong governance by emphasizing the long-term sustainability and profitability of the exchange while also advocating for the broader interests of issuers, investors, and the wider public.[32]

32 Given that stock exchanges have important obligations to the public interest, regulators often play a role in approving appointees for independent directors. Roundtable participants discussed the cases of India and Bangladesh, where for each new independent director, boards must send the names of two candidates to the securities regulators, which then chooses one of them. In Bangladesh, one participant explained, the board also requires regulatory approval to hire or remove the CEO of the exchange. According to one roundtable participant, this oversight responsibility of the regulator—whether it is directly involved in decision-making or plays more of a supervisory role—emphasizes the need for regulatory independence. It also, another participant added, requires that the regulator has sufficient resources, including staff, to adequately fulfill these obligations..

As a couple of roundtable participants said, changing the NEPSE's board composition to include more independent directors could occur even while the MOF maintained a controlling stake in the exchange. As one participant said, "Ownership is not the only issue. We should change ownership, but we should also change our governance structure by changing our board structure." Another participant echoed this point, saying, "No matter what the ownership is—even if the government maintains ownership—if they appoint directors on the board with expertise and foresight, that helps the market."

REGULATORY INDEPENDENCE AND CAPACITY

By statute, SEBON is an independent agency.[33] In practice, however, participants observed, the regulator is often not able to pursue its mandate independently and, instead, functions as an extension of the MOF. In addition to significant control over SEBON's governance,[34] roundtable participants pointed out that the MOF has final approval over—and frequently requires changes to—the language of new securities regulations.

33 The Securities Act of 2007 states that SEBON "shall be an autonomous body corporate having perpetual succession" (Chapter 2, Section 4.1).

34 The MOF's influence over SEBON occurs through the Government of Nepal's selection of the chairman and two of the other six SEBON board members.

According to the roundtable discussion, the MOF's current role in the regulatory process has at least two serious consequences for market development:

- First, it undermines the consultative process between SEBON and market participants ahead of new regulatory announcements. A transparent consultative process with the private sector helps regulators better understand the business models of market participants and anticipate how new regulatory language will affect market behavior. While Nepali market participants at the roundtable reported having open, productive communications with SEBON, they felt that the current consultative process is undermined by the fact that final regulatory approval rests not with the regulator but with the MOF.

- Second, MOF involvement often delays the introduction of much-needed regulatory reforms, according to roundtable participants. Participants said that a regulatory drafting process that should take a few months can sometimes stretch for a year or more before securing MOF approval. As a result, market participants sometimes must choose to either operate in a regulatory vacuum (potentially introducing poorly understood risks into the financial system) or forego introducing new products—products that in many cases could help develop the market and contribute to economic growth. Another problem, according to one participant, is that by the time new guidelines are issued, they are often no longer relevant because the market conditions they were meant to address have changed.

The importance Nepali stakeholders placed on SEBON's independence is consistent with international best practice. As one roundtable participant noted, the IOSCO Principles of Securities Regulation recommend that securities regulators "be operationally independent and accountable in the exercise of their functions and powers." According to IOSCO, independence requires "the ability to undertake regulatory measures and enforcement actions without external (political or commercial) interference" and implies stable, independent funding sources. The Principles further state, "In jurisdictions where particular matters of regulatory policy require consultation with, or even approval by, a government minister or other authority, the circumstances in which such consultation or approval is required or permitted should be clear and the process of consultation and criteria for action sufficiently transparent or subject to review to safeguard its integrity."[35]

35 See "Resolution on IOSCO Objectives and Principles of Securities Regulation and Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation," IOSCO (2017).

As an associate member of IOSCO, SEBON has agreed to take the steps necessary to comply with the IOSCO Principles, including operational independence. Accordingly, several roundtable participants urged the MOF to identify and implement the reforms needed to actualize SEBON's status as an independent agency, starting with establishing transparent guidelines for what role, if any, the MOF may play in the drafting and approval of new securities regulations.

In addition to operational independence, effectively regulating a growing and evolving market requires significant human capacity within the securities regulator. In particular, roundtable participants emphasized that SEBON must be properly funded and staffed to analyze activities in the securities markets and guide their development. This is increasingly true as the market grows and SEBON undertakes new responsibilities, including the supervision of the commodities exchange.

More broadly, roundtable participants agreed that public officials in the MOF and other agencies must have the knowledge, skill sets, and tools required to understand market developments and the implications of various policy reforms. As several roundtable participants said, the success of national financial development initiatives often requires high-level buy-in from political leaders from the start, and so market stakeholders and development partners need to focus on deepening the financial expertise of public officials throughout the policymaking community. According to the roundtable discussion, these efforts should extend beyond the MOF, SEBON, and NRB to such agencies as the National Planning Commission and the Ministry of Industry, as well as elected officials and their staffs. Such an approach, one participant said, "recognizes that there is a broader political dimension to how changes are made that goes beyond the specific people and departments tasked with working on financial issues."

CONCLUSION

To capitalize on Nepal's impressive recent progress and catalyze future growth through expanding access to capital, roundtable participants widely agreed that now was the time to further develop the capital markets in Nepal. As one participant said, "The government and Nepali people are optimistic, but for that optimism to materialize in the economy, we need investment."

With this overarching objective guiding the discussion, roundtable participants identified a number of practical steps—as recounted here and detailed below in the final table of this report—the Nepal Stock Exchange and other stakeholders could take to contribute to equity market development:

- To attract new issuers, there was widespread agreement that the NEPSE should no longer rely solely on regulatory mandates for listings but should take proactive steps to encourage unlisted firms to consider issuing shares on the NEPSE. Participants also widely agreed on the need to reform the IPO pricing cap regulations to allow market-based pricing of shares.

- To deepen the exchange's retail investor base, the discussion focused on broadening the geographic scope of brokerage services, developing additional retail investment products, and expanding public understanding of financial markets. Roundtable participants also argued for widening the base beyond retail investors to include local institutional and foreign investors.

- To improve the overall trading environment, roundtable participants stressed the need to ensure market integrity, improve market infrastructure, and further develop the ecosystem of market intermediaries, including through establishing market makers and potentially revising certain restrictive trading rules.

Roundtable participants widely agreed that effectively advancing this broad agenda would ultimately require reforming and modernizing the NEPSE's ownership and governance structures. They argued that government divestment would enable the NEPSE to more effectively pursue its mission, instead of subjecting its institutional role to the broader financial stability mandates of its public sector shareholders. Even ahead of government divestment, though, roundtable participants argued that changing the composition of the NEPSE's board to include more independent directors with capital markets expertise would significantly improve the governance of the exchange.

Finally, roundtable participants stressed that the full operational independence of the Securities Board of Nepal would be essential for further capital market development. They also highlighted the importance of capacity-building efforts for public officials throughout the policymaking community as crucial for developing the necessary political buy-in to advance a robust, multifaceted reform agenda for public equity market development.

Table of Recommendations

The table below captures the specific policy ideas and recommendations that emerged from the roundtable discussion. As highlighted throughout this report, many of these ideas generated a broad consensus among roundtable participants. While others may have only been raised by a single participant, they certainly merit further evaluation. Taken together, these recommendations comprehensively address major issues and could inform a strategic plan for stock market development in Nepal.

Category	Recommendation	Lead Institution
Establishing the Foundations for Capital Market Development	Address macroeconomic concerns about expanding trade deficits by increasing domestic energy production and promoting the expansion of the domestic services sector	Multiple agencies
	Improve banking service and product offerings for SMEs, including, potentially, by expanding the use of pre-approved loans, the expanded use of FinTech credit scoring models, and technical support for SMEs preparing loan application documents	Multiple agencies
	Promote the diversification of issuers in the debt and equities markets to reduce the current concentration risk	NRB, MOF, SEBON, and NEPSE
	Identify strategies to reduce contagion risks between the banking sector and equity market, including by addressing the concerns about Nepali investors using money borrowed from banks to invest in banking stocks and the potential introduction of margin lending	NRB, SEBON
Attracting Issuers	Develop an outreach and marketing strategy for unlisted firms, applying lessons from other exchanges in the region	NEPSE
	Determine whether the broader market prerequisites are in place before taking steps to establish an SME segment	NEPSE
	Study the potential for establishing an online private placement platform in the model developed by the Maldives Stock Exchange	NEPSE
	Remove the IPO pricing cap and allow market-based processes, such as book building, to determine the valuation of firms going public	SEBON
	Allow foreign private equity funds to have the same lock-up period as is imposed on local early-stage investors	SEBON

Category	Recommendation	Lead Institution
	Domestic Retail Investors	
Expanding the Investment Base	Study whether further investments in the online trading platform will be required as the market expands and new products are introduced, as informed by the lessons learned from the rollout and early performance of NOTS	NEPSE
	Encourage the further development of retail investment products such as mutual funds and unit trusts	NEPSE, banks, and brokers
	Examine strategies to expand brokerage services to communities beyond major urban centers, including, potentially, by allowing banks to receive brokerage licenses	NEPSE & SEBON
	Develop initiatives to educate the public about the risks and potential upsides of investing in public equities	NEPSE, SEBON, and brokers
	Participate in IOSCO's World Investor Week to increase public understanding of the securities markets	SEBON
	Local and Foreign Institutional Investors	
	Identify opportunities to increase local institutional investor investment in NEPSE-listed securities—and determine barriers impeding this outcome	NEPSE
	Consider establishing IPO allocations for local institutional investors	NEPSE & SEBON
	Fully adopt and enforce IFRS standards for all NEPSE-listed companies	NEPSE
	Strengthen NEPSE corporate governance policies to align more closely with international standards	NEPSE
	Identify safeguards to minimize economic shocks caused by sudden inflows and outflows of foreign portfolio investments	SEBON & NRB

Category	Recommendation	Lead Institution
Improving the Trading Environment	Increase pre-open price transparency by publishing price data before the market opens	NEPSE
	Revise NEPSE rules that affect pricing in the event the circuit breaker is activated to ensure pricing reflects material information available in the market	NEPSE
	Allow intraday trading in equities	NEPSE
	Consider allowing short selling but with restrictions to limit risks to market stability	NEPSE & SEBON
	Establish a separate clearing corporation to ensure timely clearance and settlement	NEPSE & SEBON
	Accelerate the regulatory consultative process required to establish market makers and dealers	SEBON
	Expand the range of activities brokers can undertake to include more value-added services such as market research and investment advice	SEBON
Enabling Regulatory Environment	Establish transparent guidelines about what role, if any, the MOF may play in drafting and approving new regulatory language	SEBON & MOF
	Review SEBON's funding structure as part of an overall review of its operational independence	SEBON & MOF
	Review SEBON staffing needs, particularly in light of its expanded responsibilities to regulate the commodities exchange	SEBON & MOF
	Identify priorities and strategies for increasing financial markets understanding throughout government and among elected legislators and their staffs	SEBON & MOF

Category	Recommendation	Lead Institution
Ownership and Governance	Execute on NRB divestment as planned	NEPSE, NRB, & MOF
	Determine a plan for full government divestment that avoids limiting ownership to a narrow group of market participants	SEBON, NEPSE, MOF
	Reform the regulatory provisions regarding NEPSE ownership to allow for a wider group of stakeholders to own NEPSE shares, including potentially the general public	SEBON
	Reorganize the composition of the NEPSE board to include more independent directors with capital markets expertise	NEPSE, SEBON, and MOF
	Improve NEPSE surveillance capacity and trading databases to better enforce provisions against insider trading	NEPSE
	Strengthen internal boundaries between the quasi-regulatory and profit-seeking departments of the NEPSE, potentially through establishing the position of a chief regulatory officer who operates independently of the CEO	NEPSE and SEBON

ACKNOWLEDGMENTS

On behalf of the Milken Institute, the authors wish to thank the Nepal Stock Exchange and the South Asian Federation of Exchanges for organizing and co-hosting this roundtable. The NEPSE's chairman Laxman Neupane, CEO Chandra Singh Saud, and acting manager Niranjan Phuyal merit special recognition for their support of the event, as does Jitesh Surendran, CEO of the Mercantile Exchange Nepal Limited (MEX Nepal). The authors also thank Joseph Silvanus, managing director of Dolma Consulting, for his guidance on the roundtable agenda and assistance in ensuring the participation of key stakeholders.

Finally, the authors also want to thank their Milken Institute colleagues—senior fellow Paul Leder and Carole Biau, director for Global Market Development—for reviewing early drafts of this report and providing valuable feedback.

ABOUT THE AUTHORS

John Schellhase is an associate director with the Milken Institute's Global Market Development practice. The GMD practice supports policymakers in developing countries and emerging markets in their effort to strengthen and deepen domestic capital markets and catalyze funding for national development priorities. As part of the GMD team, Schellhase has managed financial-sector development projects in Rwanda, Myanmar, Nepal, the Philippines, and Thailand. He is based in Madrid, Spain.

Staci Warden is executive director of the Global Market Development practice at the Milken Institute, where she leads initiatives in strengthening capital markets, financial inclusion, financial-market education, and innovative financial solutions to development challenges. Warden is also chair of the Rwandan Capital Markets Authority, a cabinet-appointed position. Prior to the Milken Institute, Warden spent six years at JPMorgan in London, where she ran its public-sector client franchise in EMEA, and two years in New York as part of the Sovereign DCM team. Before that, she was a director at NASDAQ and led its two market offerings for micro-cap companies, the BBX and the OTCBB. In the public and nonprofit sectors, she has served as an international economist at the US Treasury Department, start-up chief operating officer of the Center for Global Development, and a development associate at the Harvard Institute for International Development and the Carnegie Endowment for International Peace. Warden has worked or done business in over 50 countries and has served as an advisor to several ministers of finance on sovereign-wealth management, debt management, capital-market development, and financial inclusion. She speaks and writes widely on economic and financial development, financial innovation, and public-sector strategy. Warden holds an MPA from the Kennedy School of Government at Harvard University and has completed her coursework for a PhD in economics from Brandeis University.

MILKEN INSTITUTE