

# “Asia’s Challenge 2030” Global Essay Competition

A Compendium of Award-winning Essays



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## Foreword and Acknowledgements

2020 was a year like no other as the pandemic changed many aspects of our lives. In a sense, that made early 2021 an ideal time to ask the question: how would you address some of the biggest challenges in Asia in the coming decade? In January 2021, the Asia Business Council joined hands with Nikkei Asia and the Blavatnik School of Government at the University of Oxford to launch the Asia's Challenge 2030 Global Essay Competition, open to students aged 18–22 anywhere in the world.

Given the many obstacles facing young people pursuing their studies during a global pandemic, we did not know how many essays we would receive. Yet we were impressed by thoughtful submissions from universities across Asia and as far afield as California and London. We pored over essays on topics ranging from artificial intelligence and aquaculture to smart cities and virus sequencing and learned a lot in the process.

The essays reflect a generation that is asking hard questions about the challenges facing Asian societies and optimistic about the prospects for creating a better world through new modes of doing business and innovative approaches to policymaking.

Young people from Asia are increasingly globally aware. They want policymakers to adopt international best practices in public health and environmental protection, especially in areas like sustainable finance and mental health awareness. But they reject the uncritical adoption of Western models, from urban design to economic development. Many call for a celebration of their unique national and regional identities, whether through locally inspired architectural designs or the increased representation of indigenous perspectives.

Participants in the Economy, Trade, and Finance category want to improve existing economic models so that a balance is struck between economic growth and a fairer, more sustainable, and more stable world.

In the Public Health and the Natural Environment category, respondents called for holistic approaches to health. Concerns about mental wellness reflect the pressures brought about by increasingly competitive academic and professional environments, while essays about communications and interpersonal relationships demonstrate the desire for a more intentional focus on modeling healthy relationships. Still other submissions addressed the existential crisis posed by climate change and the complicated web of interrelated challenges, from plastic waste to fossil fuel use. Proposed solutions range from changes in consumer behavior to an entirely new model of development.

In the Cities and Urban Development category, the essays we received reflected a desire for smarter, more walkable, climate resilient cities, and urban environments that reflect their unique local character. Whether as consumers, as employees, or as entrepreneurs themselves, this younger generation will demand that businesses and governments adopt sustainable practices and modes of operation that benefit their communities.

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This global essay competition would not have been possible without the support of the former and current Chairmen of the Asia Business Council, Lim Boon Heng of Temasek and Daniel Tsai of Fubon Group. We are also indebted to Vice-chairman Tak Niinami of Suntory Group and Council Trustee Nazir Razak of Ikhlas Capital, who made key introductions to Nikkei Asia and the Blavatnik School.

Special thanks must also go to Shigasaburo Okumura and Daisuke Akazawa, Editor-in-chief and Chief Producer of Nikkei Asia, and Ngaire Woods and Luna Sidhu, Founding Dean and Director of Development of the Blavatnik School, for making this competition possible.

We would also like to thank our judges who generously volunteered their time and energy.

Economy, Trade, and Finance category:

- Nobuyoshi John Ehara, Co-founder, Unison Capital
- Emily Jones, Associate Professor, Blavatnik School of Government
- Katsuhiko Hara, Chief Desk Editor, Nikkei Asia

Public Health and the Natural Environment category:


- George Tahija, Principal, PT Austindo Nusantara Jaya Tbk
- Maya Tudor, Associate Professor, Blavatnik School of Government
- Futoshi Kuwamoto, Business & Market News Editor, Nikkei Asia

Cities and Urban Development category:

- Zhang Xin, Founder and CEO, SOHO China
- Sir Paul Collier, Professor, Blavatnik School of Government
- Shin Nakayama, News Editor, Nikkei Asia

Finally, we would like to acknowledge the assistance of Ashleigh Au of SOHO China Scholarships and Ruth Collier of Oxford University in publicizing the contest.

There is no doubt that this generation will be profoundly shaped by the experience of living through the world-altering events of 2020 during their formative years. But most essays took the longer view instead of focusing solely on the pandemic, looking ahead to the challenges of the next decade and beyond. Policymakers and business leaders around the world should take note of their ideas as this young generation comes of age and begins to lead local and international development in multiple fields.



**Pauline Yeung**  
Program Director  
Asia Business Council



**Colleen Howe**  
Program Associate  
Asia Business Council

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## Krati Gupta (India)

*Rajiv Gandhi National University of Law*

# The Three Pillar Multi-Stakeholder Approach to Responsible Financing: Addressing Asia's Challenges in the "Decade of Action"

## Economy, Trade, and Finance



# The Three Pillar Multi-Stakeholder Approach to Responsible Financing: Addressing Asia's Challenges in the "Decade of Action"

## Introduction

Responsible finance refers to the delivery of financial services in a manner that ensures client protection and sustainable development, by the incorporation of social, developmental, and environmental dimensions into the financial distribution system. Through coordinated public and private investment, responsible finance has a critical role to play in the current "decade of action" (2021-2030) for the implementation of the United Nations ("UN") 2030 Agenda. Given that Asia accounts for 60% of the world's population and is the largest continental economy by both nominal GDP and purchasing power parity (PPP), the achievement of the Sustainable Development Goals (SDGs) critically hinges upon the attainment of the 2030 Agenda in the region.

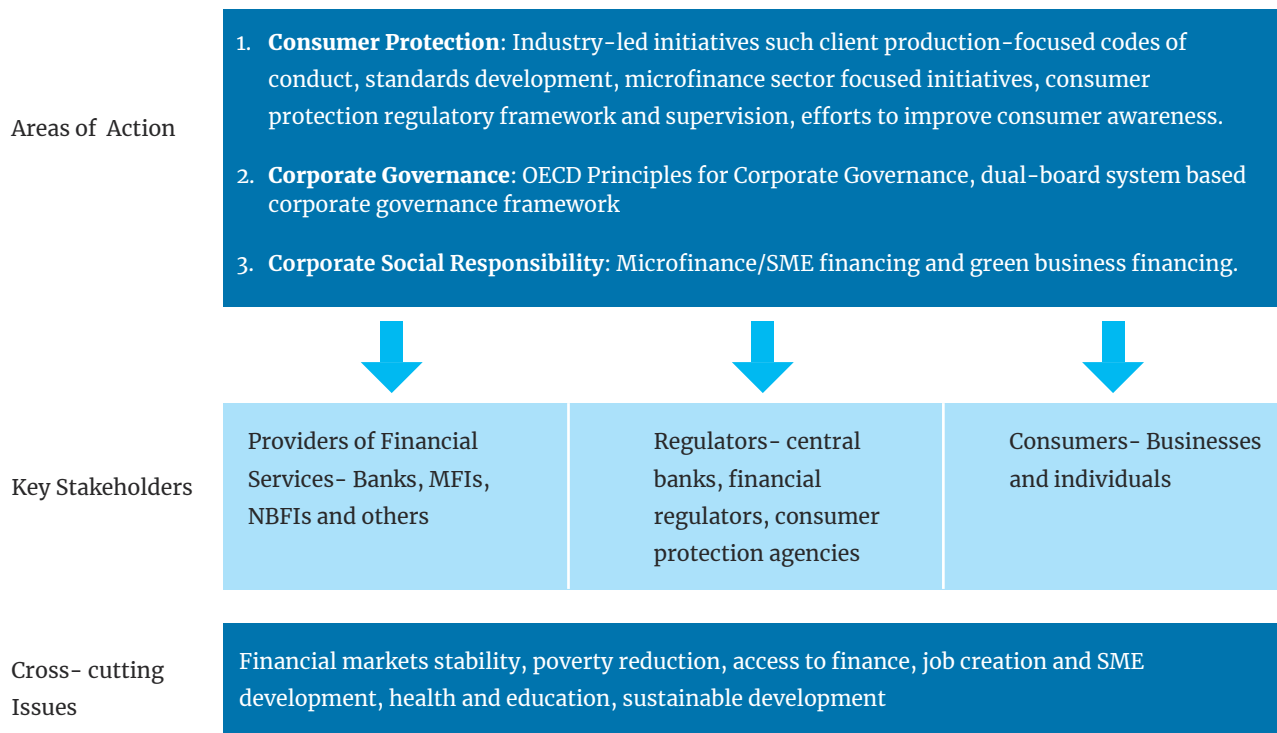
However, the low representation of Asia in global initiatives aimed at addressing responsible finance is a crucial cause for concern. The region represents only 71 out of 1,441 signatories to the Principles for Responsible Investment (5%), 64 out of 216 signatories (30%) to the UNEP Statement of Commitment by Financial Institutions on Sustainable Development and 8 out of 81 Equator Principles Financial Institutions (10%). Of the 52 partner exchanges of the Sustainable Stock Exchanges (SSE) initiative, only nine are from Asia (17%).

The COVID-19 pandemic has brought the cruciality of Environment, Social and Governance (ESG) and sustainable finance to the fore. This is highlighted by record equity inflows into ESG (\$168.74 billion in 2020) that are expected to reach \$53 trillion by 2025. Concurrently, climate risks are rising in Asia resulting in potential exposure to higher credit risk. Therefore, ESG monitoring has become critical to the management of financial risk. However, despite a tremendous potential for growth, ESG investing in Asia trails behind other regions with just 5% of assets under management invested in sustainable projects compared to 30% in North America. In light of such circumstances, this essay seeks to highlight potential hurdles and solutions for mobilising responsible finance at both national and regional levels in Asia.

## The Three Pillar Multi Stakeholder Approach to Responsible Finance in Asia

The profit maximisation objective of financial service providers needs to be balanced with the increased influence of ESG considerations in investing decisions that have a critical stake in formulating brand loyalty, public trust, and long-term corporate sustainability. The responsible finance approach as presented in the following diagram involves a balanced approach of coordinated efforts by key stakeholders, namely, financial services providers, regulatory authorities, and consumers, to address three main action areas (3 C's) of Consumer Protection, Corporate Governance and Corporate Social Responsibility.

**Figure 1: Three pillar multi-stakeholder approach to responsible finance in Asia**



It is to be noted that these action areas are not mutually exclusive and the effect of policy and industry-led initiatives are likely to have cross cutting effects. However, for the sake of simplicity, the essay addresses these areas individually.

## Consumer Protection

Consumer protection is at the epicentre of responsible finance. The three ways to advance consumer protection in Asian countries are discussed below:

### Industry-led initiatives

The main objectives of responsible finance are outreach to the underprivileged, poverty alleviation, women empowerment, and a business culture that integrates these core considerations. Therefore, microfinance services that cater to the needs of the underserved, especially the informal sector, are an important focus for finance providers committed to the principles of responsible finance. The key action points along with international precedents are as follows:

- Setting up of self-regulatory codes of conduct that align with industry initiatives for consumer service relationships, transparency, business ethics, and social performance. The SMART Campaign, an industry-wide initiative launched in 2009, incorporates seven Core Client Protection Principles (CPPs).
- Coordination with clients for microcredit risk management to alleviate the risk of delinquency, default, and over-indebtedness. Collections with Dignity at FinComún, Mexico, and Partner Microcredit Foundation's Approach to Over-Indebtedness in Bosnia are successful precedents.



- Revision of delinquency handling and collection process, improvement of credit information sharing and balancing of expansion strategies with the interests of the microfinance sector. Microfinance Transparency (MT) is a credit price transparency improvement initiative. Currently active in just 28 countries with a huge potential for revolutionizing the Asian finance sector, this industry-led initiative facilitates dissemination of national level price data by type of credit product.
- Improving complaints handling by providing adequate on-the-job training to the staff.
- Establishment of a comprehensive risk management and responsible finance framework through application of big data technology. Ant Financial takes a multi-dimensional view of risk for both its business and its customers through the application of data technology. The comprehensive risk framework of Ant Financial Group can be understood through the following diagram:

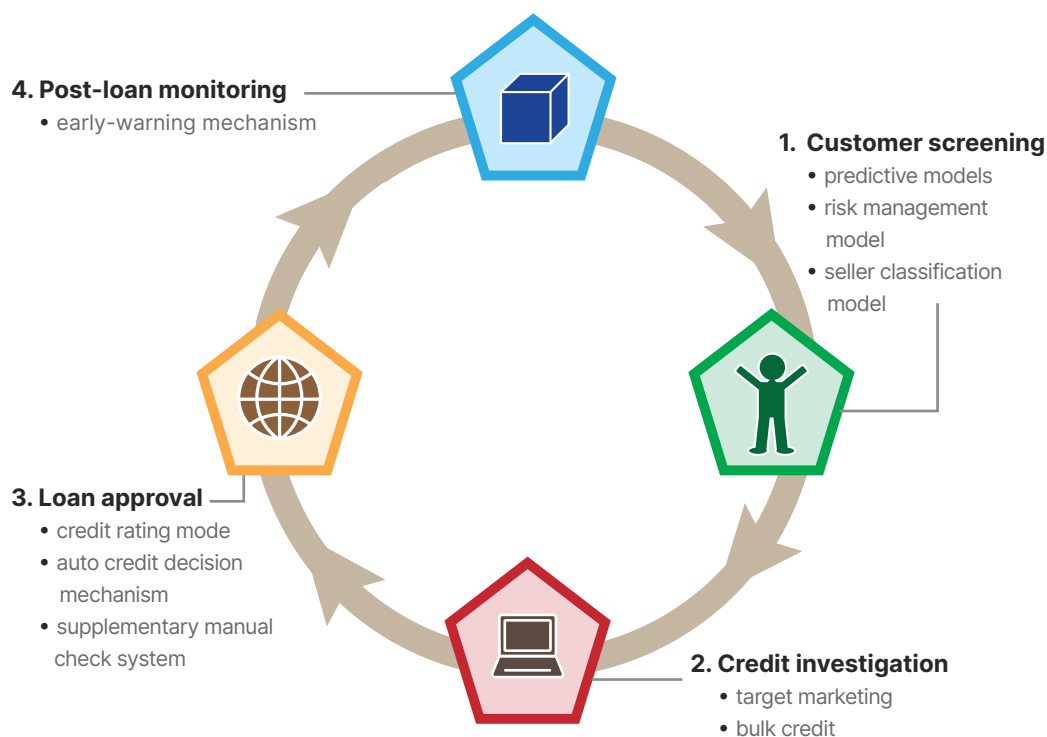


Figure 2: Comprehensive risk framework of Ant Financial Group

Sources: Ant Financial Services Group<sup>5</sup>

### Regulatory framework for consumer protection

Consumer protection regulation with sensitivity to financial inclusion goals, product transparency, price disclosure requirements, and dispute redressal mechanisms need to be enacted. Since 1979, several Asian countries have formulated consumer protection laws. However, they suffer from a piecemeal approach and fail to extend protection from problems associated with technologically advanced products such as credit card transactions, instalment credit, and e-commerce, and confusion often prevails regarding the scope of relevant consumer protection provisions. Product liability is one of the critical areas where consumer protection needs to be extended.



In light of the increasing importance of data privacy for the furtherance of client interests, specific data protection regulations need to be urgently implemented given that only 15 out of 48 Asian countries have enacted data privacy laws.

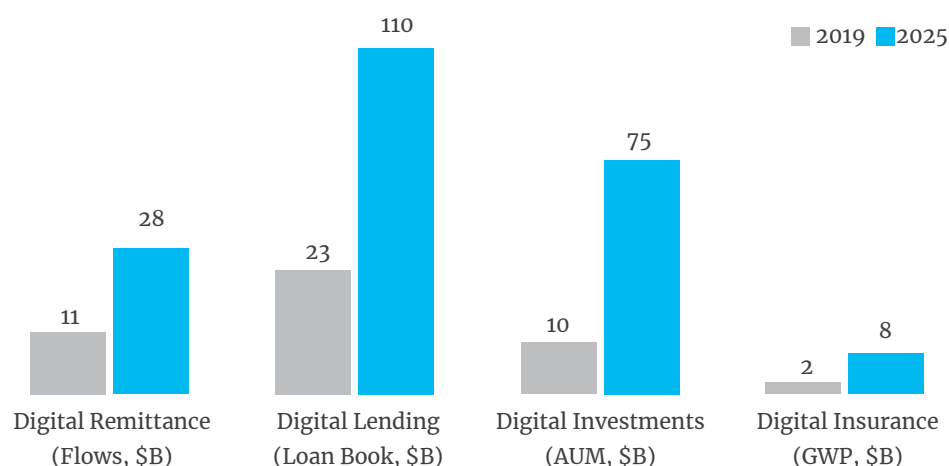
### Consumer awareness and financial inclusion

Consumers can enhance the effective implementation of regulations if they are aware of their existence and capable of exercising their rights in order to make sound financial decisions based on their own social and economic circumstances.

Some measures to address financial inclusion particularly in Asia are:

- Convening international dialogues and conferences for financial providers, NGOs, academia, and the media to promote financial literacy and the exchange of innovative solutions.  
Examples include Responsible Finance Forum and KfW-organized Responsible Finance conferences in East European and Caucasus countries.
- Developing best practices, standards and diagnostic tools for consumer protection and financial literacy.  
IFC's Global Credit Bureau Program and the General Principles for Remittances supported by the World Bank provide best practices for improving responsible finance through financial literacy.
- Developing methodologies under the aegis of ADB and AIIB for impact evaluation of financial capability interventions.  
Studies by World Bank Research Department on the effectiveness of financial education in Indonesia and Russia.
- Promoting digital financial inclusion.  
Financial innovation and big data are two new tools for corporate decision-making and customer-centric product development. The volume of digital financial services in Southeast Asia is expected to increase exponentially by 2025 as highlighted by the following bar graph.

**Figure 3: Volumes of digital financial services in South-East Asia**  
(Source: Google, Temasek, Bain & Company)



In order to ensure that the Asian financial sector is prepared to embrace this digital avalanche, keeping in mind the needs of low-income businesses, the industry and policymakers need to undertake the following steps in close coordination:

- **Fintech for financial inclusion:** The COVID-19 pandemic has highlighted the importance of the fintech sector for digital adoption. Policy incentives for fintech start-ups in the form of tax reimbursements on e-payments would assist in the process of financial inclusion.
- **Responsible Digital Payments Guidelines developed by Better Than Cash Alliance to be put to practice:** The Better than Cash Alliance is a UN-backed global partnership initiative of 75 industry members, governments, and international organisations that fosters the responsible digitalisation of cash payments. Translating the guidelines into practice requires intervention by policymakers.
- **Strategic partnerships for public and private sector engagement:** Financial services providers, policymakers, and financial regulators need to jointly develop solutions that safeguard customer privacy while enhancing the financial inclusion of underserved populations. One example is the Goldman Sachs-International Finance Corporation (IFC) partnership for the reinforcement of digital ecosystems.
- **Encouraging alternative market-based finance such as crowdfunding (including peer-to-peer lending):** Regulations enacted by China, Malaysia and the United States of America serve as valuable precedents for Asian policy makers and financial regulators.

The following diagram provides a four-stage pathway to digital financial inclusion. National policies need to be formulated based on the proposed stepwise approach.

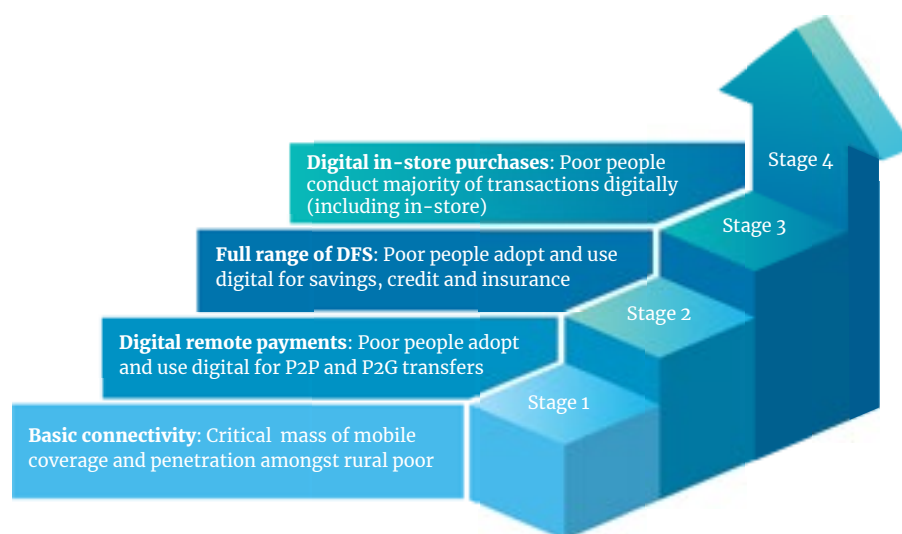


Figure 4: The four-stage pathway to digital financial inclusion (Source: United Nations Economic and Social Commission for Asia and the Pacific)

It is emphasised that these initiatives need to be and facilitated at the Asian regional level by the Asian Developmental Bank (ADB) and the Asian Infrastructure and Investment Bank (AIIB).

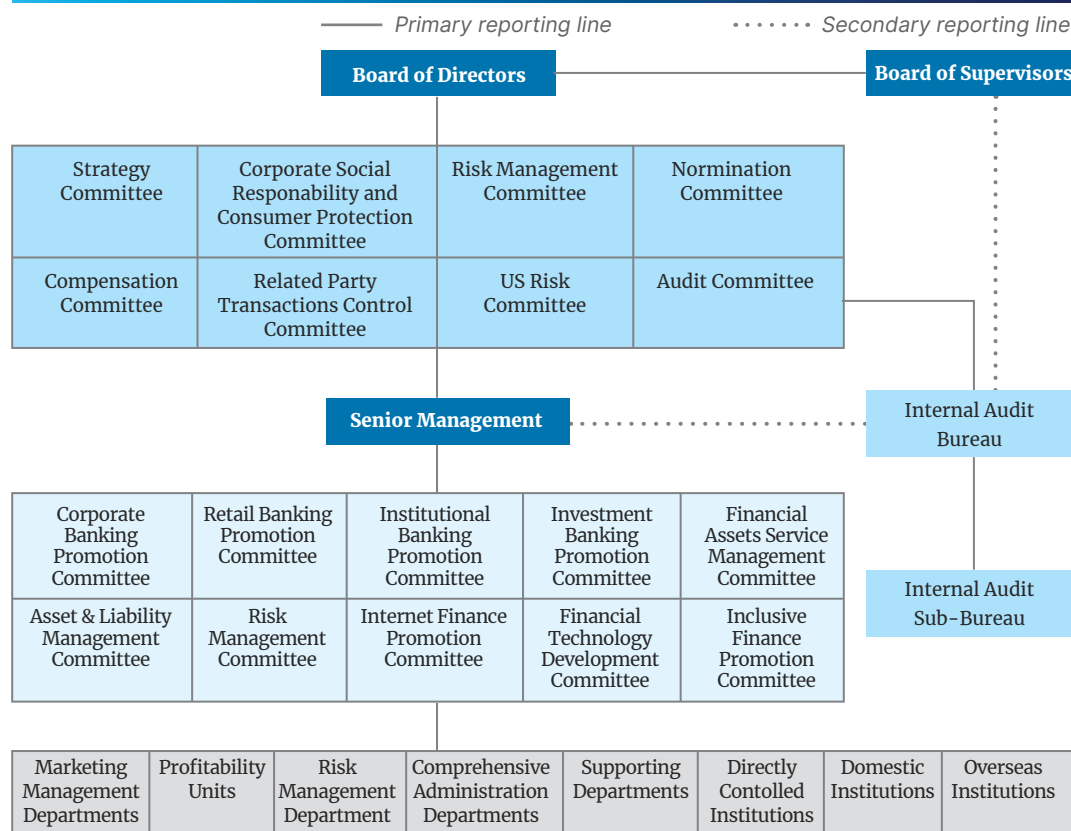
## Corporate Governance

Corporate governance is a mechanism for monitoring the activities of a company. It is an essential component for banks since it provides checks and balances and holds the bank accountable for its investment decisions and thereby safeguards consumer interests. It is imperative to note that the 1997–98 Asian financial crisis was attributed to poor corporate governance practices in the relevant countries' banking institutions and industrial groups.

The Basel Committee on Banking Supervision, in their publications “Principles for Enhancing Corporate Governance, Equator Principles, and OECD Principles for Corporate Governance”, provide sound guiding principles that seek to enhance senior management practices, risk management, internal controls, disclosure, product transparency and the role of regulators in financial institutions. Similar guiding principles on the regional level need to be formulated for enhancing individual corporate governance boards of financial institutions.

The following figure illustrates the dual board governance framework of the Industrial and Commercial Bank of China Limited (ICBC), which is globally acclaimed for its governance framework.

**Figure 5: The corporate governance structure of the Industrial and Commercial Bank of China (ICBC)**



Source: Industrial and Commercial Bank of China

Such corporate governance frameworks based on global best practices need to be incorporated in other Asian financial institutions.

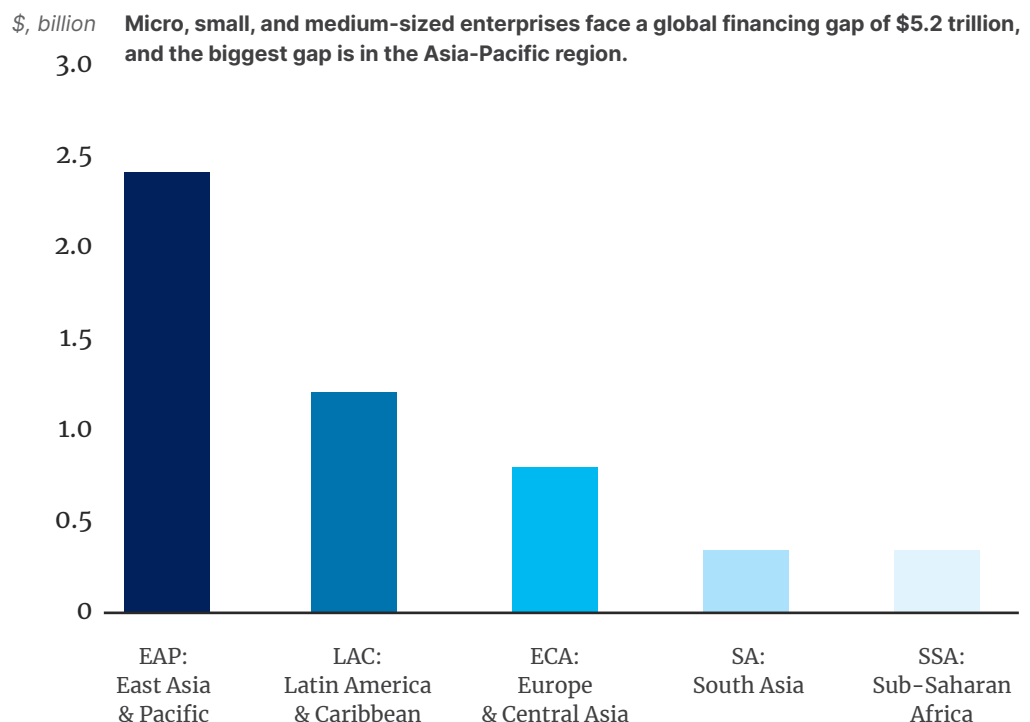
## Corporate Social Responsibility

Banks and society exist in an interdependent set-up wherein the actions of the banking community affect the underserved members of the society which it directly caters to, especially in terms of poverty alleviation, financial inclusion, and sustainable finance. Therefore, it is imperative to encourage CSR-based activities particularly in two key focus areas—SME financing and green finance.

### SME Financing

While the CSR agenda has been mainstreamed in the formal sector, it is the informal sector that poses challenges for financial institutions, especially in developing countries. The informal sector faces several hurdles, such as lack of financial literacy, gender discrimination, and a lack of sufficient collateral. As a result, the MSME financing gap has become the widest in the Asia-Pacific region.

**Figure 6: MSME financing gap in different regions of the world**  
(Source: International Finance Corporation)





Some measures to promote SME financing:

Issues faced while dealing with SMEs	Suggestions for financial institutions
Insufficiency of credit	Proper risk assessments and joint appraisals by commercial banks, DFIs and BDS providers
Delays in credit sanctions (information requirement, communication delays)	<p>Standardisation of information requirement across all financial institutions.</p> <p>The information requirement for credit appraisal process should be thoroughly explained to the SMEs in the initial stage.</p> <p>One credit officer should be accountable for each SME who would serve as the nodal point of all communication and query redressal.</p>
High collateral requirement	Consider future cash flow as primary security for the SME.
Compliance with loan agreements	<p>Thorough explanation of timing and procedures for loan compliance.</p> <p>Periodical audits of statements and returns.</p>

Other suggestions:

- Particular loans or leasing schemes customised as per the needs of SMEs for tackling the collateral constraint problem. For example, the Grameen Bank in Bangladesh provides collateral-free loans to the rural poor.
- Factoring- Allow SMEs to leverage the low credit risk of larger clients.
- Pan-Asian implementation of international best practises – examples include disaster risk reduction funding for SMEs (Japan) and Information and Communication Technology (“ICT”) based SME financing (ICBC, China).

## Green Finance

Financing business enterprises with minimum negative impact on the environment, and thereby focusing on the attainment of sustainable growth through ecologically efficient production and marketing activities, allows investors to directly contribute to sustainable financing.

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Key action areas with international precedents include:

- Sustainability disclosure – Guidelines on Listed Companies’ Environmental Information Disclosure introduced by the Shanghai Stock Exchange.
- Integrating environmental risks into financial regulation – The Bank of Bangladesh mandates the inclusion of environmental risk management in the investing activities of bank and non-bank financial institutions.
- Green credit and bond guarantees – examples include the ADB green bond framework and social stock exchanges of U.K., Singapore.
- Quotas for priority areas – such as “Obligations of Insurers to Rural Social Sectors” issued by the Insurance Regulatory and Development Authority of India (IRDAI).

A concerted pan-Asian effort to incorporate these measures is essential for furthering the aim of responsible finance by Asian financial institutions.

## Conclusion

The coming decade presents a prime challenge for Asian economies— meeting the goals of the 2030 Agenda while recovering from the economic blows of the pandemic. The promotion of responsible finance based on the proposed 3 C’s approach holds the key to the realisation of both these objectives. It is imperative to note that the proposed approach would require a pan-Asian commitment by all the key stakeholders—financial services providers, policymakers, and consumers. While regulatory mechanisms are of crucial importance, self-regulation rather than legal enforcement needs to be prioritised as the first step wherever possible. It is humbly presented that a pan-Asian implementation of the proposed solutions based on the international precedents highlighted above is of critical importance to Asian economies in tackling the challenges of the coming decade.

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Private Money for the Public Good –  
Unlocking Private Equity for Asia's Sustainable Finance

**Economy, Trade, and Finance**



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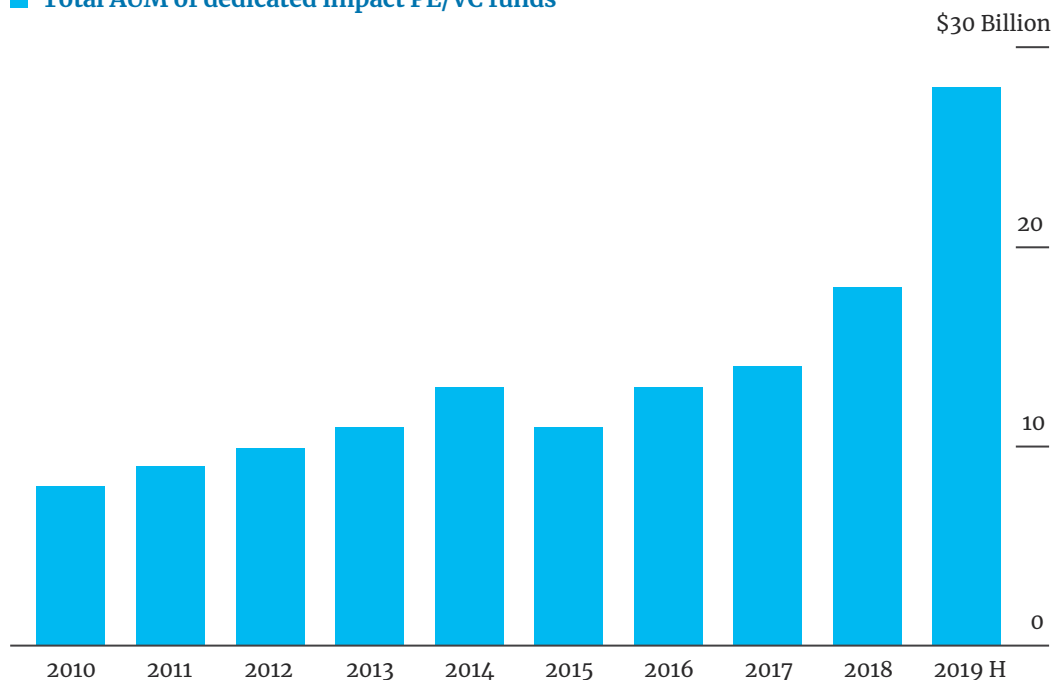
# Private Money for the Public Good – Unlocking Private Equity for Asia’s Sustainable Finance

## Sustainable Finance and the Role of PE

“Capital markets are one of the most powerful tools we have in the fight against climate change – and one of the most overlooked,” Michael Bloomberg has said, shedding light on the importance of mobilizing private capital to facilitate sustainable development. His opinion is unprecedentedly relevant now amidst the widespread devastation of global supply chains and exacerbation of existing social problems such as income inequality, as a result of the COVID-19 pandemic. 71 million more people will be pushed into extreme poverty in 2020, according to the United Nations. Moreover, the events of last year have demonstrated the resilience of businesses with high Environmental, Social and Corporate Governance (ESG) credentials, as evident from the fact that The ESG Focus Index outperformed the MSCI ACWI Index by 93 basis points per year.

The amount of capital raised by dedicated impact funds is accelerating

■ Total AUM of dedicated impact PE/VC funds



Sources: Preqin, Bain & Co, Bloomberg Green

Figure 1: Total Assets Under Management (AUM) of dedicated impact PE/VC funds

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Globally, realising the tangible benefits of sustainable investments in the aspects of reducing costs, increasing operational efficiency, and mitigating risks, more private capital is pouring into sustainable funds (Figure 1). Private equity (PE)-focused investors planned to double their capital raised in 2020 as compared to 2019 levels, higher than the planned increase among private debt-focused investors. According to a 2019 survey by UBS of over 600 asset owners in 46 countries, 78% of Limited Partners (LPs) are already integrating ESG principles into their investment processes. This high level of demand from LPs is now pushing General Partners (GPs) to respond with their own ESG initiatives.

Amongst various asset classes, PE funds, with their unique combination of risk capital and expertise in improving portfolio companies' operations, are exceptionally well-positioned to using equity and quasi-equity to grow the best sustainable business models, thus driving sustainable finance to greater heights. Amidst the rising momentum of sustainable investing, LPs encounter greater demands from regulators, investors, and civil society to accelerate sustainability, due to their close contact with GPs, who are directly in charge of managing funds and monitoring portfolio companies' performance. It is therefore crucial to ensure that fund managers adopt a "long-termism" for portfolio management and are able to identify promising firms that generate both competitive financial returns and responsible outcomes.

## Asia's Role in Responsible Investment and Its Current Development

Asia, amongst other regions, plays a pivotal role in driving global sustainable development due to its abundant investment opportunities and pressing sustainability issues. To achieve global sustainability, Asia needs approximately US\$66 trillion to limit temperature rise to 1.5° C - over half the investment required globally. The region also presents the world's largest investment opportunity of US\$10 trillion in contributing to three of the most tangible infrastructure sustainable development goals (SDGs). Just Southeast Asia's green economy alone could provide up to US\$1 trillion in annual economic opportunities by 2030.

Encouragingly, more governments are joining traditional trendsetters, such as Japan and South Korea, in the sustainability drive. China notably pledged to achieve carbon neutrality before 2060. In the private sector, there was a 15% increase between 2018 and 2019 in Asian fund managers who have signed up to the Principles of Responsible Investment (PRI).

Despite immense efforts from different stakeholders, all countries, including those in ASEAN, are falling short of the progress needed to achieve the SDG targets by 2030. Moreover, Asian investors are more reluctant to invest in sustainable funds as ESG investing in East Asia trails other regions with just 5% of AUM invested in green funds, compared to 30% in North America. Such reluctance stifles capital flows to PE funds that could potentially generate positive societal outcomes.

Therefore, this essay aims to unpack the key challenges faced by Asia's PE funds in integrating ESG considerations and to propose three strategies that could help GPs manage ESG issues across their portfolios, consequently enhancing investment value.



## Key Challenges

### Non-Standardized ESG Disclosure Undermines Impacts Measurement

While there is a global consensus for PE funds to align their investment strategies to the UN's SDGs, “sustainability” as a term is extremely broad—comprising 17 goals, 169 targets, and 232 indicators (Figure 2), and a globally-binding taxonomy is yet to be established. Some of the SDGs are by nature more quantifiable (eg. affordable and clean energy), while others are less quantifiable (eg. gender equality).



Figure 2: United Nations' Sustainable Development Goals 2030

The lack of a globally-recognized ESG disclosure framework not only leads to the fragmentation of impact measurement, it also disincentivizes investments into promising companies. To date, there are various ESG frameworks drafted by different organizations, with the main ones being the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB) and the Taskforce for Climate-related Financial Disclosures (TCFD), all of which have different guidelines. Most of them simply present a list of requirements for PE funds to adhere to, which are none other than a “tick-the-box” exercise. For instance, while GRI outlines ESG reporting standards, these guidelines focus mainly on inputs, rather than the actual outcomes of those policies and practices.

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In reality, many industry-led initiatives rely on firms' self-reporting and inevitably, some firms turn to "green-washing" by using "sustainable language" for PR purposes. Tarioq Fancy, the former chief investment officer of Sustainable Investing at BlackRock, pointed out that existing funds are often cynically rebranded as "green" — with no discernible change to the fund's underlying strategies. In other cases, ESG products comprise companies such as petroleum majors and other large polluters like "fast fashion" manufacturing to boost the fund's returns. This diverts capital away from truly sustainable funds.

### **Inconsistent Integration of ESG Considerations Across the Fund Lifecycle**

PE funds in Asia integrate ESG principles to varying degrees—some have extremely detailed guidelines in place while others have none. In addition, 56% of LPs believed that GPs' focus on ESG was inconsistent across the entire fund lifecycle, with ESG considerations appearing important during the due diligence stage to mitigate risks but tapering off during the post-investment and value creation period.

Among most funds, only a few followed up on portfolio companies' ESG metrics and used this data to inform decisions during portfolio management. Consequently, this undermines the creation of returns for funds as ESG incorporation not only mitigates risk, it also adds value to investments as well. For instance, having high ESG credentials provides funds' portfolio companies with a value uplift by boosting sales, provided they can prove that they source their raw materials sustainably.

### **Data Challenges Skewed Investment Decisions**

While data science technologies enable fund managers to filter out material ESG metrics from distracting ones, problems of data scarcity, inconsistency, and poor validity are prevalent. As Asia is still a developing region, most countries do not have scientific and real-time data available, leading to a lack of valid data. Moreover, some data are by nature harder to measure, especially the "social" metrics. For instance, while diversity data are material for fund managers to identify promising companies, they are usually collected from employee surveys that collect subjective responses. Such data are considered "qualitative data" and have major validity issues.

Data inconsistency is another major challenge in developing Asia. A large proportion of sustainable data exists in inconsistent forms, including figures found in research reports which are not raw datasets, and data sources obtained from regulatory disclosure requirements, thereby limiting the application of data analysis methods to derive meaning from them. For instance, within mainland China alone, its 34 provincial-level regions report data in different formats—some in pdf, Word or even an image. Such data requires the extensive deployment of technology like image recognition so as to extract the data. Given the complex landscape of sustainable data, it is extremely challenging for fund managers to interpret it.

## From Investing in Values to Driving Value

### Standardizing ESG Reporting Frameworks

Financial reporting standards must be aligned to each SDG. I propose a set of globally-binding “International Sustainability Reporting Standards (ISRS)”, which would serve as the sustainability reporting equivalent of the IFRS, to facilitate due diligence on ESG factors. The basis of this framework should be scientifically driven, quantifiable, and capable of demonstrating to investors that the companies’ inputs to sustainability are indeed yielding meaningful impacts. Since there are already multiple reporting frameworks in place, such as the SASB, the ISRS does not have to be drafted from ground up, rather, it can be done through reviewing and consolidating existing frameworks.

Simply put, we cannot expect firms to voluntarily report or self-regulate their sustainability impacts, and thus there needs to be a legally-binding framework that is calibrated to financial materiality and sustainability outcomes, as investors want concrete data on how their contributions to funds are yielding fruitful impacts. In terms of taxonomy building, some progress has been made on a regional scale as finance ministers from ASEAN announced their support for an ASEAN Taxonomy of Sustainable Finance on 30 March this year. Like the EU’s taxonomy, it will serve as ASEAN’s common language for sustainable finance and account for both international goals and ASEAN’s specific needs.

### ESG Integration through Subscription Credit Facility

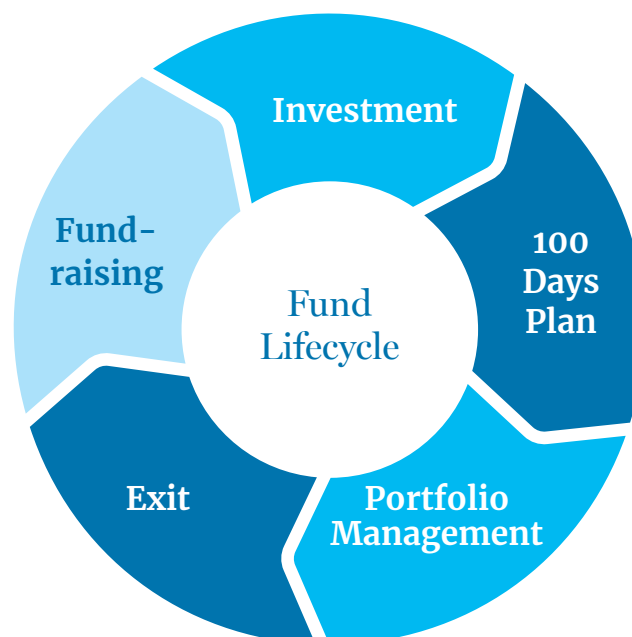


Figure 3: Integrating ESG considerations into every stage of funds’ life cycle

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Sustainability considerations can be embedded into every phase of funds' lifecycle as follows (Figure 3):

- Due Diligence: Perform positive and negative screening on companies based on ESG metrics and alongside financial criteria.
- 100 Day Plan: Identify key priorities related to ESG integration during the initial investment period, such as building up clear reporting guidelines within portfolio companies.
- Portfolio Management: Establish clear metrics to measure ESG impacts so the fund can monitor financial and sustainable outcomes simultaneously.
- Exit: Possible multiple enhancement due to the improved ESG profile leading to reduced risk and enhanced returns.
- Fundraising: Attractive returns on assets due to positive ESG impact will improve the reputation of the GP, allowing for more successful fundraising.

Furthermore, innovative financial instruments such as a sustainability-linked Subscription Credit Facility (SCF) can be introduced to future-proof companies and allow GPs to integrate ESG throughout all aspects of funds' operations. One leading example would be the largest ever ESG-linked SCF launched in June 2020 by EQT Group. The SCF adopts an innovative pricing model designed to incentivize portfolio companies to improve their performance in the areas of gender equality, renewable energy transition, and corporate governance. The aggregated results from the portfolio companies' ESG efforts will be compared with pre-set KPI targets and eventually impact the SCF's interest rate. Essentially, the more ESG achievement the portfolio companies demonstrate, the better the financing terms the fund will receive.

### Digitizing an Open Cloud-Database

Data quality and availability are keys to developing the sustainable investment industry. As such, a cloud database where portfolio managers disclose data associated with sustainable deals can be developed by leveraging big data, artificial intelligence (AI), satellite sensor technologies and advanced analytics.

In particular, the dataset should be free-of-charge and open to all—both technically (i.e., available in a machine-readable standard format so that it can be meaningfully processed by a computer application) and legally (i.e., explicitly licensed in a way that permits commercial and non-commercial use without restrictions). This enhances data transparency and allows investors and fund managers to track the impacts of investments.



Moreover, deploying robust data science helps bridge the communication gap between financial professionals and environmentalists. As these two professions often look at different metrics, with each party focusing more on their field of expertise, it is vital for them to achieve consensus so that asset managers can better monitor their funds.

## Conclusion: Profits with Purpose

In the face of global challenges, sustainable PE funds will continue to serve as a new frontier of capitalism that devotes private money to the public good. Overall, for all the three proposed strategies to work, there is a need for regional advocacy in Asia given its varied economies and diverse ESG issues. For GPs, the emerging trend toward the integration of sustainable practices presents both challenges and opportunities. As the ESG movement grows, it is becoming more apparent that, with a little creativity, there are innovative ways for GPs to address LPs' expectations regarding ESG issues.

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## Asian Central Bank Mandates: What about Equality?

**Economy, Trade, and Finance**



# Asian Central Bank Mandates: What about Equality?

## Problem

Asia has seen widening inequality which is harmful to long-term economic stability. One contributing factor is the increasing use of Unconventional Monetary Policy (“UMP”) by Asian Central Banks (“ACBs”). ACBs have contributed towards increasing inequality because of UMP’s different distributive effects – meaning that the distributive benefits of expansionary monetary policy can no longer be seen to be passive. This is an area of oversight for ACBs because to date, they do not consider the long-term consequences of these new distributive effects. Change is important because there is growing scholarship that shows that higher inequality impacts economic stability, which is crucial for Asia’s continued competitiveness. Indeed, the status quo is an oversight due to the institutional limitations of ACBs – there is currently no mandate to consider equality as an area of consideration. In face of this institutional gap, the legislative bodies of Asia can leverage Covid-19’s political climate to widen their central banks’ mandates to include equality as a secondary area of consideration.

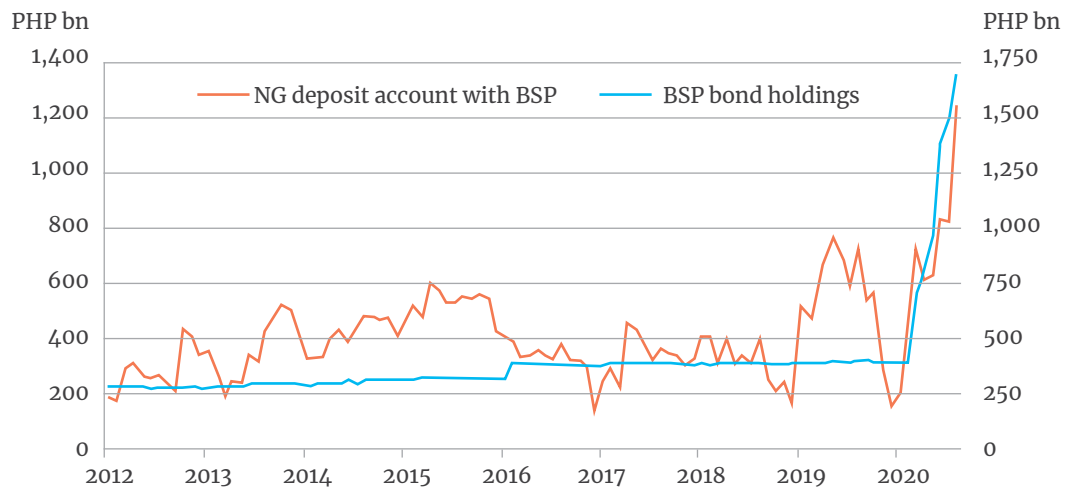
Having elaborated on the scope of the problem, the rest of the essay will be organised as follows. Section 2 will include a discussion of the problem placed into the unique context of Asia and why the status quo is inadequate. After this, Section 3 will include an outline, detailing the proposed reform of widening ACB mandates. Section 4 meanwhile will consider the feasibility of the reform.

## Context

UMP is typically only associated with Japan. This is because Japan pioneered UMP, with the Bank of Japan being one of the first to pursue negative base rates. In addition, it was one of the first to establish a QE programme, which now has a purchasing commitment of Japanese government bonds of ¥80 trillion per year—roughly 15% of GDP.

However, the truism that Japan is the only country engaging in UMP no longer holds for the Asia Pacific at large. This is because Covid-19 has meant that both developed market and emerging market central banks are experimenting with UMP. To illustrate, across Asia, there been increasing use of UMP in countries such as the Philippines, Indonesia, India, and Korea. As an example to show this sort of experimentation, Figure 1 displays the Philippine central bank’s balance sheet, showing that it engaged in QE by purchasing PHP 1.1 trillion worth of bonds from the market, equating to 5.6% of GDP. This new use of UMP is unprecedented and expected to continue as more ACBs reach the zero lower bound (where nominal central bank base rates are close to 0%).

## Philippine central bank balance sheet



Amidst this rise of UMP across ACBs, what is less well known is that these unorthodox measures have led to novel and compounding distributive effects. This is because the use and expected escalation of UMP increases income and wealth inequality. This effect occurs as UMP increases asset prices greatly, which is disproportionately to the benefit of higher-income households. As a result, UMP increases income inequality as higher-income households hold more assets in their portfolios in comparison to lower-income households – which thereby compounds into wealth inequality.

The increasing use of UMP and its more unequal distributive effects means that ACBs' status quo mandate is antiquated for the new environment that Asian economies find themselves in. Whilst the majority of ACB mandates include price and financial stability, there is an institutional gap due to the vagueness of "financial stability," which does not include equality as an area of consideration. This is a pressing problem – quantitative analysis has shown that increasing inequality contributes towards economic instability because of the increased risk of financial crises. However, to date, ACBs do not explicitly factor in the new distributive effects in their decision-making processes.

This poses a serious issue for ACBs because the continued use of UMP will compound the unequal distributive effects, and thus compound the risk of economic instability. Change is pressing as the use of UMP is likely to continue in the foreseeable future in part due to the liquidity shock that Covid-19 has had. Facing this issue, the central banks of Asia must adapt.

## Widening the Mandate – Equality!

The previous section highlighted how the status quo is inadequate because the rising inequality from UMP increases the risk of economic instability. To conquer this oversight, this essay proposes that the legislative bodies of Asia initiate reform to widen their central banks' mandates to take into account equality as an explicit secondary area of consideration. I will first explain in-depth what the recommendation is and then why it would help overcome the problem that the status quo mandates bring.



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The widening of the mandates would mean that there would be multiple objectives for ACBs. This is because within the proposed reform, equality as an area of consideration acts as ACBs' secondary objective. As such, the objective of equality would be tiered. As a result, this would mean that the main objective would still be to continue pursuing monetary policy that achieves the status quo mandate, but the decision-making procedure would be widened to include considerations of policies' distributive effects. Importantly, this widening to include equality is to supplement the status quo mandates since greater equality leads to increased price and financial stability.

It is important to note that the secondary aim of equality is left intentionally broad. This is so that equality is only pursued in accordance with price/ financial stability to avoid politicisation of ACBs. There is considerable debate on what the "just" or "correct" level of inequality should be, and the recommendation does not make explicit claims to the "appropriate" level of inequality. Indeed, this appropriate level should be left to the government, as decided by its voters. The widening of the mandate is simply to supplement ACBs' status quo mandates. As a result of this intentional broadness, normative claims with regards to the correct level of inequality are avoided. Considerations of inequality are only there so that the monetary policies that encourage the most stability can be pursued. Understood as such, the reform would make ACBs' already implicit mandate explicit, through a public announcement that the institutions intend to include equality as an area of consideration.

In making equality more of an explicit consideration, it helps to overcome the problem of the status quo mandate by shifting the default position of the ACBs. This is because pre-reform, ACBs would not explicitly consider equality and thus would discount the distributive effects of monetary policy. Indeed, pre-mandate reform, consideration of anything other than the narrow primary aims of central bank mandates would incur legal and ethical problems. However, post-reform, the central banks would now additionally consider the compounding distributive effects of UMP policies. The benefit arising from this is that any "unnecessary" inequality is avoided. This is because by widening the mandate, ACBs would have increased flexibility to pursue monetary policy that would acknowledge and consider its own distributive effects. Hence when considering policy options, central banks could *ceteris paribus* decrease inequality, when they previously would not have been able to do so. Due to this, further financial stability is achieved as any "unnecessary" inequality will be avoided – unnecessary here when considering its impact on economic stability. Overall, widening the mandates of ACBs would help supplement ACBs' status quo mandates. This would help further Asian economies, and thus competitiveness, by putting in place a more effective mandate.

### Feasibility: Electoral Risk from Business?

A feasibility constraint comes from the potential electoral risk arising from pushback from business. This is because internationally oriented business groups tend to have preferences for monetary convergence. Monetary convergence here means that they would prefer if ACBs had a base rate that is close to the global average. Hence, the widening of mandates might be perceived as going against monetary convergence. As a result, within the respective legislative bodies, it might be perceived as electorally risky to oppose the interest of an important supporter base.



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However, this electoral concern is mitigated by two factors. Firstly, the purpose of having equality as a secondary area of consideration is that it addresses the risk of inequality affecting financial stability. Hence, it would be in the interest of Asian businesses to approve of the mandate reform. To explain further, having equality as a sub-target whilst potentially going against monetary convergence in the short-term, fulfils a greater common goal of long-term financial stability. Hence even if the monetary policy may diverge from the world average for a short period of time, as highlighted above, it helps toward further financial stability in the long run – the key foundation for Asia’s economic interests.

Secondly, the concern is mitigated on another level with regards to electoral risk. This is because the timing of the policy proposal coincides with a window of opportunity opened by Covid-19. This window of opportunity opened by Covid-19 has meant that what is electorally possible has changed due to the policy-feasibility constraint known as the “Overton Window” being widened. The effect of the widening Overton Window is that businesses are now said to have a more long-term view of survivability post-Covid. As such, they would further be incentivised to support the proposal recommendation as it is in their own interest for longer term stability. Hence, concerns about electoral risk arising from business perspectives are mitigated.

### Feasibility: How About Asia’s Ageing Demographic?

Asia is experiencing rapidly ageing demographics, with the number of elderly people expected to double from 535 million in 2015 to 1.3 billion by 2050. This ageing demographic is important as they have a distinct group preference with regards to monetary policy. This is because the elderly tend to have lower inflation rate preferences due to savings and pensions that benefit from a low-inflation environment. This could translate into a great number of elderly voters who want low inflation rates. Yet, widening ACBs’ mandate might be interpreted as the institution wanting to increase inflation rates to pursue the sub-target of equality.

However, this concern is assuaged when considering the practical effects that the widening mandate would have. The design of the sub-target of equality means that it can only be pursued *ceteris paribus* to ACB policies’ effects on status quo mandates. To explain further, it is effectively subservient to the main objective of price and financial stability. As a result, any monetary policy choices that ACBs make will still have to consider price and financial stability as its main objective. Indeed, as highlighted above, any consideration of equality as a secondary target is for the aim of promoting long term stability. Hence upon closer examination, the policy recommendation poses little electoral risk to the elderly if the purpose of adding equality as a secondary ACB target is properly communicated. The widening of the mandate is to support the long-term stability of the Asian economy, which is in the self-interest of the growing elderly population in Asia.

## Conclusion

Overall, this policy proposal has highlighted the weaknesses of ACBs' status quo mandates. The proposal offers Asia a solution to improve this through legislative bodies widening ACBs' mandate to include equality as an area of secondary consideration. It has shown that widening the mandate would further promote ACBs' independence and credibility. This in turn would further support Asian financial stability and competitiveness. This would be achieved through having the institutional flexibility to jettison any "unnecessary" inequality *ceteris paribus* to their primary mandate objectives. The proposal has also shown how this reform would not pose electoral risk to core supporters, including to businesses and the growing elderly population.

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## KomU as a Strategy to Improve Family Communications

**Public Health and the Natural Environment**





# KomU as a Strategy to Improve Family Communications

## Background

Families are the smallest unit and the main pillars of society and the nation. The role of families is so significant that the former UN Secretary General in 2010 stated that “the very achievement of development goals depends on how well families are empowered to contribute to the achievement of those goals. Thus, policies focusing on improving the well-being of families are certain to benefit development.” Yet, according to a number of newspaper and government reports, the ongoing COVID-19 pandemic has resulted in increased family conflicts worldwide, some of which can even be considered violence. In Indonesia, for example, quarrels and fights were the reason for 58% of divorce cases filed, making it the primary reason for divorce two years in a row.

## Effect of family conflicts on individuals and family members

A family environment with constant conflict will not fulfil basic psychological needs such as autonomy, competence, and relatedness. Therefore, individuals are unlikely to be able to satisfy the needs which are essential for psychological growth, integrity, and wellbeing. In addition, while there is evidence of the powerful consequences of family relations on individual functioning, not only does family conflict affect adult individuals who are involved, but also children within that environment. Healthy family relations, marital relations, and parenting behaviors are conducive to well-functioning parents and children, while parental mental health problems, marital conflict, and low-quality parenting determine dysfunctions in children (e.g. low academic achievement and psychological problems). Research shows the impact of family breakdown can have a negative impact on children, both physically and psychologically, causing feelings of shame, sensitivity, low self-esteem, and withdrawal from the environment.

## Communications failure as a source of conflict

Oftentimes, communication failures become the source of conflict, and even result in more conflict. To understand the influence of family communication on family conflict, there are two approaches proposed by Socha: (1) family communication plays a role in increasing positive family input (for example, increasing affection, creativity, hope, and happiness), (2) the optimal conditions created by family communication facilitate the development of family potential as well as individual growth and development. Indeed, communication in resolving conflicts is one of the most pressing problems that often occurs in relationships, with relationship therapists agreeing that dysfunctional communication is the most damaging and difficult to treat.

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## So, how can we improve communications within families?

I statement and Feedback Sandwich method in resolving communication issues. In these cases, Overall and McNutty suggested that direct communication that explicitly conveys problems to be addressed will be more successful than an indirect approach that may convey that changes are unnecessary and therefore fail to address the problem. Commonly recommended, the feedback sandwich is a method which involves delivering feedback in a particular order: a positive statement about specific behaviors the individual performed well, a corrective statement about behaviors the individual could change or improve, and an overall positive statement. The feedback sandwich has been adopted in a wide range of settings and professions (e.g. among physicians, nurses, coaches, educators, and managers). The method was endorsed as it enables individuals to send other individuals the message that they recognize their value while giving feedback. On the other hand, the I statement is a communication tool in which the first-person pronoun is used (using “I” instead of “you”) such as “I am bothered by your habit” rather than “You have a bad habit,” therefore reducing negativity and blame. The technique uses nonconfrontational methods to resolve conflict and can be used to establish meaningful dialogues that help foster a relationship of understanding.

## Written tool to accommodate/facilitate communication

To understand the potential of text-based communication, we can look at two existing theories. The Hyperpersonal Model approach argued that interpersonal communication through text allows individuals to carefully construct messages, and attributions caused by those messages may be exaggerated in the absence of additional real-time visual and audio cues leading to hyperpersonal or enhanced impression. Backing this theory, studies have found that online content is better for increased self-esteem, interpersonal impressions, and may also influence impressions of the self. Another theory is the Internet-Enhanced Self-Disclosure (IESD) hypothesis which proposes that individuals often disclose more in text-based communication, which contributes to greater well-being. In support of this theory, studies have found that people often disclose more online than offline. Kluck et al. have also found that contact via text-based channels positively affected feelings of social support and life satisfaction in comparison to audio-visual communication, which had no significant effect on social connectedness and social support. Individuals stated that they used text-based channels to effortlessly exchange personal information.

## KomU

Therefore, the author proposes KomU to improve family communications across Indonesia. KomU is a platform that leads effective communication based on the “I statement” and “Sandwich Feedback” methods. The program drives family members to use the principles of “I statement” and “Sandwich Feedback” by providing a template the members can fill to voice their concern and send. If they wish, they can opt to send the form anonymously. The default frequency of KomU use is on a weekly basis to ensure the exchanging of communication by every family member without making it seem one-sided and to prevent excessive criticism. With such a system, KomU aims to facilitate communication between family members in a nonthreatening and constructive way to prevent family conflicts and promote well-being. The



schedule and anonymity options are determined by the family members and can only be changed with the approval of all members. KomU will be promoted through social media targeting youth and young parents and motivating them to use the KomU, which can be used online across devices, in the family.

To test the effect of KomU, the author distributed a brief questionnaire with KomU samples. As a result, participants reported more positive feelings when presented with a KomU sample and were able to better recognize the feelings experienced by the other person as well as understanding the changes that were expected. Moreover, participants respond more positively to the KomU sample, reducing blank answers (choosing not to respond), avoidance to the problem, and blame.

What are you feeling in such a situation?	
Without KomU	With KomU
Disappointed (4)	Disappointed (2)
Angry (4)	Angry (1)
Upset (6)	Upset (1)
Sad (6)	Sad (4)
Regret / feeling guilty (8)	Regret / feeling guilty (7)
Confused (5)	Confused (0)
Shame (1)	Shame (0)
Tired (1)	Tired (0)
Not understood (1)	Not understood (0)
Not Comfortable (1)	Not Comfortable (0)
Feeling left behind (1)	Feeling left behind (0)
More comfortable / quiet (0)	More comfortable / quiet (6)
Can better understand / digest the situation (0)	Can better understand / digest the situation (3)
Touched (0)	Touched (3)
Feeling moved (0)	Feeling moved (1)
Feel valued / understood / understood (0)	Feel valued / understood / understood (13)
Happy (0)	Happy (3)
Relief (0)	Relief (5)

Do you understand her feeling and the change they wanted? (If yes, according to you what are they feeling and desiring?)	
Without KomU	With KomU
Yes and understand (20)	Yes and understand (33)
Yes but don't understand (8)	Yes but don't understand (0)
No (6)	No (0)

After reading the message, what will your reply be?	
Without KomU	With KomU
(Choose not to answer) (16)	(Choose not to answer) (8)
Ignore (Whatever , yes) (4)	Ignore (1)
Asked for forgiveness (6)	Asked for forgiveness (1)
Defensive (2)	Defensive (0)
Demanding an improvement in attitude / behavior (2)	Demanding an improvement in attitude / behavior (0)
Thank you (0)	Thank you (5)
Give thanks and seek change (0)	Give thanks and seek change (2)
Thank you, ask for forgiveness and seek change (0)	Thank you, ask for forgiveness and seek change (6)
Comforting feelings (1)	Comforting feelings (1)
Ask forgiveness and seek change (2)	Ask forgiveness and seek change (4)
Seeking change / resolution together (0)	Seeking a joint change / resolution (3)
Attempting to reflect the KomU format (0)	Attempting to reflect the KomU format (2)

Sustainable Development Goal 3 is aimed at ensuring healthy lives and promoting well-being at all ages, and one of its targets (3.4) specifically mentions mental health, targeting the reduction by one-third of the premature death rate from non-communicable diseases through prevention and treatment, as well as the promotion of mental health and well-being. Strengthening family stability by improving the communicational and behavioral skills of family members could contribute to developing individual and relational capacities, which will have a positive impact on other areas of well-being and social life. Through family programs, such as education programs, community support groups, family therapy and counseling, families can be a key component in achieving individual health and wellbeing. Beyond that, UNICEF has reported the implications of family stability in child development, showing that targeting families may well promote Sustainable Development Goal 4, specifically indicator 4.2.2 in increasing the proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being. Lastly, improving communications has been found to reduce the experience of aggression in various settings, therefore tackling indicator 16.2.11 by reducing the proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers. The author strongly believes that KomU can become part of the solution to support families and increase wellbeing in Asia and worldwide.

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Prototype (Under construction):  
<https://komu.vercel.app>

Distributed sample of KomU (Translated to English from Indonesian)

A. Imagine you get a promotion at work, making you more preoccupied with additional tasks. When you come home, you are confused because your family members are holding events at home and they did not tell you about it. You asked about the events via a message online, and your family member was annoyed by your message and replied, "I've told you before, but you're always busy. Never mind, I'm too tired to talk about it."

- What are you feeling in such a situation?
- Do you understand her feeling and the change they wanted? (If yes, according to you what are they feeling and what do they want?)
- After reading the message, what will your reply be?

B. Imagine a situation that is similar to the previous, however, this time the message said, "I'm happy you got a promotion, but I've been feeling sad for a couple of weeks since I feel like I am not noticed. I would feel more appreciated if you listened to me more often. On the other hand, I will try to adapt to your busy life as well. I am happy that you continue to strive for the welfare of this family."

- What are you feeling in such a situation?
- Do you understand her feeling and the change they wanted? (If yes, according to you what are they feeling and what do they want? )
- After reading the message, what will your reply be?



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# Meeting the Challenge of Plastic Waste Recycling in Japan and China

**Public Health and the Natural Environment**





# Meeting the Challenge of Plastic Waste Recycling in Japan and China

## Introduction

Plastics have played an important role in human industrial development and livelihoods in the 20th century. However, plastic waste nowadays has become a serious problem which may endanger human health and the global environment. According to the UN, Japan ranks second in the world in terms of plastic packaging waste per capita. Although Japan recycled an impressive 84 percent of the plastic collected in 2018, there are still structural problems. By contrast, China has been the world's largest solid waste importer for the last quarter century, which shows that China's ecological environment has paid a huge price for developed countries to achieve low-cost resource recycling. This essay explains the different stages of plastic waste recycling in Japan and the issue of China's environmental regulation. The possible solutions which can be achieved by 2030 including a stop on exporting plastic waste, improving the quality of plastics used, and most importantly, raising public awareness through education.

## Background

In Japan, in order to prevent solid waste pollution, the government has issued a number of laws in recent years to prohibit environmental damage in the process of garbage recycling and disposal and require companies to reuse recyclable garbage. However, due to the high cost of waste disposal and reuse, the related companies face operating losses. As a result, Japan has begun to export a large amount of waste overseas, and China became the largest market for dumping Japan's waste.

## Recycling of Plastic Waste in Japan

In the 1980s, when Japan entered the "bubble economy" period, people attached great importance to the exquisite packaging of goods, especially when sending gifts. The sudden boom in the economy led to a sharp increase in both the amount and type of garbage, forcing the Japanese government to adjust its waste management policies. With the cooperation of the Japanese public, by the 1990s, sorting and disposal procedures for garbage and recyclables were fully rolled out and achieved good results. However, plastic waste accounts for a huge proportion of the remaining waste that is not reused. At that time, plastic waste was classified as non-burnable waste, which meant most of the plastics were dumped at landfills without recycling.

## Intensive incineration

With an increasing amount of garbage and a shortage of landfills, Japan's urgent demand was to develop a proper way of recycling plastic waste. While Japan recycled 84 percent of the plastic collected in 2018, more than half of the collected plastic

goes through thermal recycling, which means that the plastic waste is burned in incinerators to generate energy. Without filtering technology, incineration releases a huge quantity of dioxins and CO<sub>2</sub> into the atmosphere. This has triggered health concerns since many of the emissions are carcinogenic and there is stigma against local produce. From this perspective, Japan failed to put the 3R policy (recycle, reduce, reuse) as the heart of its waste strategy, and instead achieved a “high recycling rate” by relying on incineration, which caused other forms of pollution. Even with its technological advantages, Japan lacks sufficient efforts to promote the recycling of plastic resources and excludes many plastic products that could be further recycled and reused.

## Export of plastic waste to China

Just like other developed countries, Japan has high domestic labor costs and strict processing environment standards. It is unprofitable to recycle and even requires local governments to pay high subsidies for recycling. This has thus triggered a rapid increase in the export of waste plastics to developing countries such as China and India. Indeed, China has been a major global importer of waste products in recent decades. Asia generated 74% of the plastic waste in the world in 2016, and until 2017 Mainland China imported the most plastic waste, such that it has been described as “the wasteyard of the world.”

Country	Municipal solid waste (MSW) 2016	Industrial Solid Waste (ISW) 2016	Plastic ratio in MSW%	Plastic waste in MSW	Plastic waste in ISW	Total plastic waste 2016	Total plastic waste 2016	Total plastic waste 2016
China	203.6	1480	13	30.54	18.5	49.04	49.19	49.71
India	71.2	715.1	10	8.54	8.9	17.48	17.58	17.66
Japan	43.2	392.8	12	6.04	4.9	10.95	11.07	11.19

*(Statistics on waste plastic generation in Asian countries (Mt), Liang, Yangyang et al, January 2021)*

As the world’s largest plastic producer and consumer, China is actively developing a management policy for global plastic waste. In July 2017, China announced a ban on plastic waste imports to reduce pollution in the recycling process. Consequently, this ban resulted in Japan increasing exports of plastic waste to alternative countries such as Thailand and Vietnam.

## Promoting Public Awareness in Japan and China

In Japan, single-use plastics can be found in all aspects of everyday life. It is common to get free forks and spoons with bento boxes in any Japanese convenience store. Due to Japan’s culture of gift-giving, not only souvenirs at the shopping mall, but even fruit and vegetables may be wrapped in multiple layers of plastic. It is said that “every person in Japan uses around 300 or 400 plastic bags a year, or more than 40 billion for the entire nation.” However, people are so used to the convenience culture that they hardly think of how difficult it is for the plastics to be decomposed. Therefore, raising public awareness has become an urgent issue for the Japanese government to solve.



*(Bananas ft. Hello Kitty in Tokyo store, Fran W, 2020)*

*(Over packaging is a real problem, Robin Lewis, 2019)*

In China, even though the government has tightened import policies, the major problem is that there is not enough public awareness, especially in rural areas. The classification system for domestic waste has had little effect due to the public's limited knowledge of garbage sorting. Moreover, many garbage recycling workers have to stand by the bins every day just to untie the plastic bags and separate garbage into the different bins. It shows that many people nowadays still cannot figure out what is “recyclable” or “non-recyclable” since there is no detailed guidance or proper fining system.

Fortunately, new regulations are being announced in major cities starting with Shanghai. In 2019, Shanghai entered a new stage of garbage recycling and required people to sort trash into four categories--residual waste, wet waste, recyclable waste, and hazardous waste. Individuals who fail to do so may be fined up to 200 yuan. This policy raised public awareness and even reduced the number of plastic cutleries in takeaways. So far, nine cities including Beijing, Shanghai, Taiyuan, Changchun, Hangzhou, Ningbo, Guangzhou, Yichun, and Yinchuan have issued domestic waste management regulations. A possible aim by 2030 for China can be the popularization of the new garbage regulation even in rural areas.

## Conclusion

Overall, both Japan and China are still on their way of improving new regulations to deal with plastic waste. In my opinion, the challenge for Japan by 2030 is firstly to stop exporting plastic scraps so that people can truly realize the importance of reducing plastic production. In order to build a new recycling system by increasing the recycling rate, Japan has to take responsibility for its own garbage rather than shipping it to developing countries. Secondly, Japan should innovate technology for improving low-grade plastics that can be easily reused. It may be unprofitable at the beginning but is definitely worth developing over the long term. Thirdly, a competitive system such as “Green City” can be set up to encourage citizens' passion for maintaining the image of their hometown. The local government of the most green city should be awarded a prize to complete further construction.



(Models wearing a garbage bag dress, Pinterest, 2017)

Most importantly, the lack of public awareness is a common issue for both Japan and China. Spreading basic recycling knowledge through radio, television, newspapers, fashion shows, or exhibitions of plastic products, especially at schools, can attract young people's attention, which may be one of the best ways to strengthen environmental awareness. Finally, all countries should tighten their own environmental regulations to reduce traded waste in Asia. In 2019, 180 countries and regions around the world unanimously adopted the amendment to the Basel Convention in Geneva, Switzerland. It is a global mission to incorporate the management of plastic waste into a legally binding framework, which will make the global plastic waste trade more transparent. With global cooperation, improving waste management will surely secure human health and the environment.

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## Tackling Unrealistic Beauty Standards in Japan and South Korea

**Public Health and the Natural Environment**





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## Tackling Unrealistic Beauty Standards in Japan and South Korea

Unrealistic beauty standards are a well-being problem in Japan and South Korea. Today, in 2021, there are many women who are affected by these standards both physically and mentally, influenced by models like female idols or the “underweight-is-beautiful” values propagated by mass media. The World Health Organization defines “health” as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity”. Thus, an underweight individual, who may no longer have periods or may have an eating disorder, does not correspond to this definition. Some women make efforts to be thin through severe dietary restrictions and excessive exercise, which may lead to serious eating disorders. To decrease the number of women who suffer from the physical burden and “underweight-is-beautiful” values, by 2025, we should make the decision to create a novel standard for female health on a global scale. Finally, by 2030, all women who dislike their own body shapes should be empowered to find their own definition of beauty based on that global standard, with efforts at both the local and global levels.



*Diagram: 3 Steps for 2030*

What is the best way to be beautiful? You buy new clothes or cosmetics or have your hair cut, right? In fact, there are many Japanese women who immediately think of losing weight to meet their ideal beauty standards for various reasons. In this essay, I warn that this recent habit has dangerous aspects because excessive thinness can lead to infertility, serious eating disorders, and mental disabilities. I chose South Korea to serve as a comparison, because I believe Korean women also face similar social problems. After all, Japanese women tend to be influenced by Korean culture, customs, and lifestyles. How do we protect women’s physical and mental health and fix their biased images of beauty? What concrete measures should we take to solve the present situation and increase the number of healthy women by 2030?

First, let us look at the commonalities and differences in Japan and South Korea in terms of awareness among young women of how being underweight is a health and mental issue. This section identifies three elements--BMI, the experience of diet, and anorexia--and analyzes why there are common and different features.

The first point is BMI. Understanding the average BMI of each region is the clearest way to understand how different the weight standards are. Body mass index (BMI) is a simple index of weight-for-height that is commonly used to diagnose obesity in adults. Worldwide, 2.8 million people die each year because of obesity, which is another serious health problem. The world average BMI of women is 26. But while North America and Africa have a higher BMI, relatively poorer African areas and some Asian countries including Japan and South Korea tend to have lower BMIs. More specifically, about 21% of Japanese and Korean women corresponded to underweight following the BMI standard in 2017.

Nutritional status based on the WHO and “Asian criteria” values		
Nutritional Status	WHO criteria BMI cut-off	“Asian criteria” BMI cut-off
Underweight	<18.5	<18.5
Normal	18.5 - 24.9	18.5 - 22.9
Overweight	25 - 29.9	23 - 24.9
Pre-Obese	-	25 - 29.9
Obese	≥ 30	≥ 30
Obese Type 1 (obese)	30 - 40	30 - 40
Obese Type 2 (morbidly obese)	40.1 - 50	40.1 - 50
Obese Type 3 (super obese)	> 50	> 50

*A BMI chart depicting BMI ranges recommended by WHO and Asian criteria values (Possible, India BMI Calculator for Men & Women | BMI Chart | Truweight (possible.in))*

The second point is the experience of losing weight. Here I draw on questionnaires about the awareness of losing weight and whether women have made efforts to do so or not. According to one study in Japan, about 70% of female college pupils want to be slim, and 58.7% of them have actually tried to lose weight. More or less, their ideals for weight or body shape are different from their actual body shape, and this desire drives them to take action to lose weight regardless of their age. In South Korea, 70% of young women have dieted. Not only that, while people in developed countries get fatter gradually, Koreans remain thin overall.

Third, the proportion of women who suffer from eating disorders such as anorexia is an important dimension. According to the investigation by Ministry of Health in Japan in 2014 to 2015, there were around 25,000 eating disorder patients, and most of them were young women who had trouble with anorexia, rather than hyperphagia. On the other hand, in South Korea, there were more aged patients compared to Japan. The common feature in both countries is the high rate of women, who account for about 80% of all patients. Recently, elderly patients in South Korea increased because of unique concerns related to their age such as stress or high-caloric food, a phenomenon that is not seen in Japan.

But what are the specific challenges and causes for unrealistic beauty standards in Japan and South Korea?

The biggest factor for wanting to be underweight in Japan is traditional and novel values, which needs an additional explanation. First, traditional values mean that we have been imprinted with the stereotype of what typical beauty is ever since we can remember. Japanese media such as magazines or TV programs have told us “slimness is beautiful” for a long time and people unconsciously adopt this way of thinking. This thinking is represented even in today’s variety shows, for example, talents who are overweight compared to others are relegated to the role of comic buffoons.

Second, novel values refer to the recent trend especially among young women to idolize K-pop idols or cultures. Their slender arms and legs or slim waist exposed from costumes appear in music videos, music programs, or concerts for many fans, and this becomes the symbol and standard of “beauty” for certain women. Many women are unanimous in saying, “I want to be slim!” or “My figure is awful, I need a diet.” Here we can see a serious problem which must be solved to secure a healthy and bright future.

Excessive and dangerous beauty standards also exist in South Korea. There is social pressure for women to be beautiful. Huffpost reported a specific example in 2017, when one Korean woman criticized the unrealistic, overly thin figure of mannequins in fashion brands, and claimed that the social trend admiring mannequin-like slimness encourages women to lose weight and hate their bodies. This incident shows that even ordinary routines in daily life gives them the impression that they need to look a certain way. In addition, appearance is one of the most crucial factors in job hunting or marriage in South Korea, which is a more deep-rooted issue than in Japan.



Mannequin Demonstration

(Huffpost, 마네킨의 체형은「야세すぎ」 韓国で女性団体がデモ(画像集) | ハフポスト([huffingtonpost.jp](https://www.huffpost.jp/)))

The desire to be underweight has been the chain binding women to unrealistic beauty standards, especially in Asia. Observing the global figures, the weight of Asian women is lower than the healthy standard. However, women in Japan and South Korea are strongly influenced by the modern media or traditional values in their country, and controlled by the thinking that, “The more weight we lose, the more beautiful we become.” The values attaching body shape to beauty might deprive them not only of physical and mental health but also their future.

Let us consider innovative measures to solve this life-threatening health challenge. These tough problems demand thorough social reforms to change the old-fashioned standards created by the media. Mass media and government should spread the importance of diversity and teach that it is wrong to judge people by their appearance and that thinness is not necessarily equal to being beautiful.

It is difficult to solve in the short term because this problem is related to a very deep-rooted mentality. There is a need to fix that little by little. What I want to insist is that this issue should be taken on not as a national or regional issue but as a global issue. Looking at the world, some countries or regions do not have “slimness is beauty” values. Some countries idealize BMI levels that correspond to a healthy standard. We should learn how they have transitioned, adopt the good points from their approach, and occasionally ask for advice. Breaking down old-fashioned or novel values can change individual thinking gradually, and it is most important for all women to accept their body shapes without comparison to others’ beauty standards.



Japanese plus-size model (La farfa, la farfa (ラファ) 2019, July la farfa編集部 | HMV&BOOKS online - 191090719)



Korean plus-size model : VIVIAN GEEYANG KIM (plusmodelkorea.com)



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# Indigenous Cities: Reframing Modernity and Our Cities

**Cities and Urban Development**



# Indigenous Cities: Reframing Modernity and Our Cities

## A Critique of the Status Quo

It is no secret that Asia faces many challenges. Home to many of the world's developing nations, it seems almost impossible to imagine where to start. In my little nook of Asia, as South and East of Asia as one can get, the Philippines is no stranger to the challenges all our neighbors face. From poverty to democracy, economy to peace, none feel so close or pertinent as the growing issue of identity. What I hope to achieve in this essay is to illustrate how the issue of identity is closely related to the development of our cities, and how a shift in perspective might make all the difference.

From a personal level, I have struggled to find what makes a Filipino. It is odd that despite the fact that I live in the capital of our country, I struggle to see from my surroundings markers of my national identity. And with the growing movement of a West-centered globalization, I believe it is a problem we face as one Asia. Highly urbanized cities are seldom high in cultural heritage or cultural celebration. Leading up to the third decade of the 20th century, it is a question in the minds of all academics and the politically-savvy among us: where and how do we see Asia in a globalized world?

This problem of identity is contingent on our view of modernity and development. Whilst modernity as a theory is often critiqued by scholars today, one cannot deny that it is in the name of modernization that our cities have been developed. Lampard notes how the years between 1750 to 1950 marked an “unprecedented urbanization of people and economic activity” in the development of cities all across the West. More than three decades after the beginning of aggressive development, the remnants can be found not in traces, but as a nearly intact framework of current development. For the layman, these cities that we live in stand as symbols of progress. However, here we find the problem: if our cities are symbols of modernity, our modernity a thrust of globalization, a globalization rooted in the West, then where in this model is there room for something that is indigenously ours?

Ask any local here in the Philippines what the most developed part of the country is, and they'd answer Taguig City. Ask them why, and they'd say, “because with tall buildings and cement floors, it looks just like New York.” Unfortunately, this is true in other nations as well. When you look at the “most developed” parts of any Asian nation, it is the same sense of buildings and cement with little to no greenery. The idea of “better” isn't local, but completely foreign and constructed. One might attribute such claims to the scars of a post-colonial nation--but I say it lies in our conception of modernization and development.

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The call is not to go rejecting modernization. Quite the opposite, in fact. Cities, embodiments of modernity, whilst currently the symptom of a larger problem, are the key to changing the status quo. There is no doubt that these cities have provided countries with opportunities for growth in commerce and technology. However, as we discuss cities' successes, we must also recognize their numerous shortcomings. With high poverty rates, a lack of cultural celebration, and the threat of environmental challenges, it isn't hard to see that whatever growth accumulated in these spaces is far from inclusive. The rest of the nation might never experience the development offered by our cities. The marginalized members of our society that exist outside our cities are denied access to development.

Interestingly enough, there is one particular marginal community that is able to face the economic, environmental, and cultural challenges posed to modern cities. It is in the Indigenous People of Asia that we might find a framework that is not only sustainable and inclusive, but also uniquely ours.

### Remember the Indigenous, Returning to our Roots

Asia is diverse, and a one-size-fits-all solution will not work. In Europe one can move countries, from Spain all the way to Poland, and see that the change is gradual. Each country is influenced by the last, and while not completely the same, they share the same cultural traits and values. In Asia the story is different; go from India to China to Indonesia and you will be met with very different peoples, politics, and cultures. It is that difference, however, that makes us the same: each nation has a unique indigenous culture that is alive, albeit constrained.

According to the International Labor Organization, about two-thirds (260 million people) of the world's population of Indigenous People (IP) are in Asia. But if so many indigenous communities are alive in Asian nations, where are they then in creating developmental plans? By the very foreign and "globalized" look of our cities we see the absence, rather the imposed silence, of indigenous people in the conversation. Sadly, it is also in this region, especially in Southeast Asia, that Indigenous People face high levels of exploitation and oppression. They are excluded from the conversation and often forcibly removed from their lands for development.

Oddly enough, in the diminishing areas where IPs do hold their lands, both nature and people flourish. 29 percent of Key Biodiversity Areas and 23.6 percent of Protected Areas here in the Philippines fall within the domain of indigenous people. Their role in preserving these areas is crucial. In my own encounters with indigenous communities, there are low levels of inequality amongst the people. The area around them is preserved and seemingly almost untouched despite centuries of occupation by their ancestors. This isn't to suggest that there is no framework of development present. However, their idea of development is centered not on the accumulation of wealth like in cities, but rather on the environment as humanity's sole provider – a fact that many cities have forgotten in their pursuit of wealth.

There are also economic challenges in IP communities that must be addressed. The UN Development Programme says that Indigenous People are most likely to experience poverty. While the lands they own are untouched, the world beyond has changed.

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They once depended solely on nature for survival, but as urbanization entered their lands and exploited natural resources, nature is no longer as abundant as it used to be. IPs are faced with a lack of job opportunities as the main centers of opportunity – cities – have excluded them in their development. It is in this impasse where cities and IPs might be able to help each other. The call is a change in perspective, one that accounts for the benefits of cities and the knowledge of the indigenous.

This perspective is starkly different from the economy-oriented goals of our cities. But perhaps it is the reframing of this perspective that will solve our challenges, allowing our cities to be inclusive and sustainable, ready for the challenges of nature and time. Cities are often the most damaged during natural calamities, be it a typhoon, floods, or a global pandemic. In indigenous communities, by listening to the land and the application of indigenous knowledge, illness and death are low. It is clear that by centering development around our environment, the IPs are doing something right, thus we in the urban areas ought to learn from them. Many worry that a more indigenous model would reduce the potential of economic gain. But how long will that economic gain last with scarce resources and the displacement of those who protect them?

To change one's perspective is a great thing to ask, may it be on the individual to the social level. However great challenges require even greater efforts and solutions. All hope is not lost in Asia. As the region develops and solidifies its political and economic position on the international stage, there is time to begin, even in increments, that change. The knowledge is already accessible just right outside our cities. The tools are already present with legal frameworks across Asia allowing for policy changes. What is left then are people who believe in this change, in which development must be centered on nature and culture, not on cement and accumulation.

## People, Policy, and Progress

The guiding principle for achieving this new perspective of development is grounded on this: including the indigenous people in developmental planning because of their invaluable knowledge. In the physical planning of cities, it is indigenous people who know the environment the best. They are aware of which soil is soft and prone to landslides, which areas are prone to flooding, and which trees and plants are crucial to the survival of the species of animals endemic to the area. Although there is a moral benefit in being considerate to land, there is also a clear benefit in creating cities that are both sustainable and disaster ready.

Sustainability efforts can also be increased by the mutual respect of city developers and indigenous peoples when it comes to land. IPs have never been selfish people and have been open to helping cities in their access to raw materials. Under their care, forests and rivers are prevented from abuse and allow generations of people, both indigenous and not, to have reliable access to them. Businesses in the cities can enlist the help of IP communities in ensuring a reliable supply of raw materials and addressing the growing economic challenges faced by a pre-colonial culture in a hyper-capitalist world.

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Both efforts can be done with legal frameworks. In the Philippines, the Indigenous People's Rights Act stands as a landmark legislation for the international community as an example of how we can secure the rights of indigenous people. The use of land can only be granted through consultation with indigenous peoples. Policies like this can be implemented further, such as by pushing for IP representation in citizen councils. Cities are after all as political as they are economic. By creating policies that protect their rights, providing opportunities to participate in economic affairs, and passing laws that solidify their political capital as protectors of the land used, we include indigenous people in urbanization and make them partners in development: a form of urbanization and development that is not based on a Western framework, but one that is uniquely ours--uniquely Asian.

### Metanoia: A Change of Heart

There is a sense of humility when one becomes open to learning from another. I believe that in our pursuit of modernity, our cities have forgotten that sense of humility. The people in them have forgotten what it ever meant to be more than just a member of a global society. I admit that the steps proposed, although grounded in legal action points, tend toward the abstract rather than the tangible. Most solutions today still operate under the paradigm of western urbanization, that cities are the apex of progress, and that the economy is all important. But under that paradigm, I doubt if we will ever find a way to solve our problem of identity, a problem that shapes our cities and the spaces where we exist. It is for that reason that I implore those who want to solve the problem of our cities to start with that paradigm shift, a shift that need not be foreign or highly academic. It is a shift towards humility, in which we can listen to those who see the world much differently than we do. Perhaps it is in the paradigm of indigenous knowledge that we might find the solution to Asia's biggest challenges. And it is only when we can include them in our cities that we can start that process. The issue is bigger than inclusion, bigger than sustainability: it is the challenge of how we will define Asia in a globalized world.

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# Reinventing the Asian Megacity: Absorbing Climate Change with Sponge Design

**Cities and Urban Development**



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# Reinventing the Asian Megacity: Absorbing Climate Change with Sponge Design

In 2016, the Boston Museum of Fine Arts held an exhibition called *Megacities Asia*. The Museum invited eleven artists from six Asian megacities to respond to the political, environmental, and social changes unfolding in their home cities. The artists, hailing from Beijing, Shanghai, Delhi, Mumbai, and Seoul, produced immersive sculptures capturing both the utopian hopes and dystopian anxieties of their metropolitan homes. Through visual experiments with material, texture, proportion, and juxtaposition, the artists evoked critical questions about urban migration, displacement, development, preservation, globalization, and climate change.

The curators of *Megacities Asia* wrote in the exhibit introduction that “megacities are not only seen, but also felt.” Indeed, they are — and more so every year. The percentage of people who will intimately feel rather than remotely see cities globally is set to increase from 47% at the beginning of the century to 60% in 2030 according to the United Nations. This is historic — over the course of three decades, approximately two billion people will have migrated from rural to urban areas, predominantly in Asia and Africa. In Asia, the rate of urbanization is the highest in the world at 1.5 percent per year, meaning that more than 55 percent of the Asian population will be urban by 2030. Much of Asia’s urban movement will be to megacities — broadly defined by the United Nations as “a metropolitan area with a total population in excess of ten million people” — which will increase in size and abundance over the next decade.

Current and Future Megacities in the World, 2018 and 2030 (Source: UNESCO)







Super-Natural, 2011/2016, Han Seok Hyun, Museum of Fine Art, Boston (Source: New Scientist)

Of the 37 global megacities in 2018 seen in the map above, 22 are in Asia. By 2030, 10 more megacities will emerge, of which seven — including Chengdu, Surat, and Kuala Lumpur — will be in Asia. This will bring the proportion of global megacities in Asia to nearly two-thirds, all while most of Asia’s existing megacities will continue to grow.

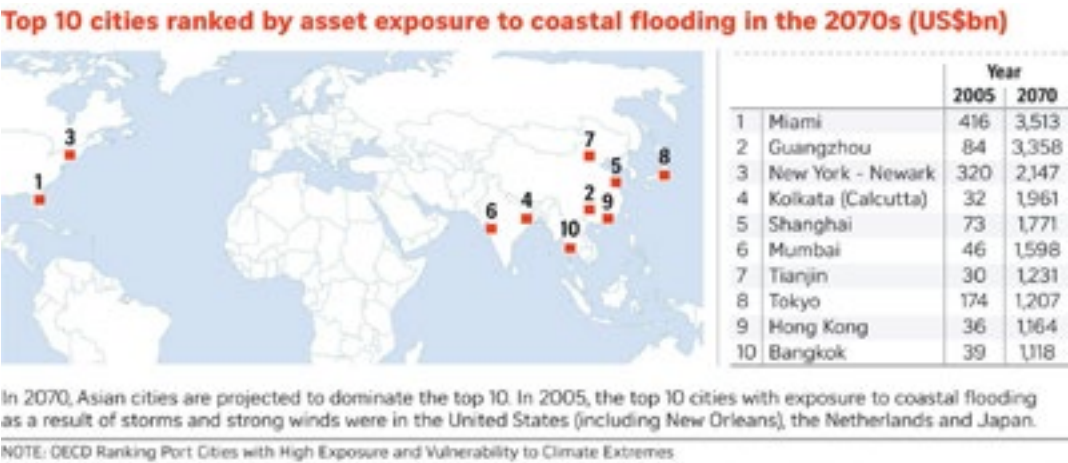
Asia’s ever-expanding megacities are grappling with many of the problems highlighted by the installations at the Museum of Fine Arts, Boston in 2016, where Seoul-based Han Seok Hyun asked arguably the most daunting question of this century in his installation Super-Natural. By constructing a bright green landscape of rice wine bottles and dishwasher detergent packages, Hyun

challenged the viewer to consider how urban development can be reconciled with environmental preservation and climate security.

Megacities of Asia are uniquely exposed to the effects of climate change. Many of Asia’s megacities are situated on low-lying coastal areas frequently hit by strong storms and heavy flooding. By 2030, 200 million people will live in flood plains across Asia. Global insurer Allianz has estimated that in the next 50 years, Asia will have eight of the world’s 10 most exposed cities to coastal flooding from storm surges and wind damage including Mumbai, Tianjin, Bangkok, and Tokyo. The Intergovernmental Panel on Climate Change noted in 2014 that without adaptation, the majority of people affected by coastal flooding by the year 2100 will be in East, Southeast and South Asia, while McKinsey Global Institute warned in a 2020 report that “Asia is on the frontline of a changing climate.” The report added that infrastructure and urban areas are still being constructed in many parts of Asia, making the region well-positioned to develop structures and implement technologies that are resilient in the face of inevitable extreme climate events.

Estimated cost of natural disasters

Storms can have a devastating impact on businesses. Here’s a look at the damages disasters bring and the prospect of greater losses.



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How can Asian countries prepare to face the disproportionate impacts of climate change over the next decade while the largest urban migration in human history transpires? How can megacities, many of which lie in low-elevation zones and near major rivers be more resilient, equitable, livable, and sustainable spaces? Reputed urban geographer and social scientist Terry McGee writes in *Living in the Megacity: Towards Sustainable Urban Environments* that megacities must transform into “low-carbon cities” with new lifestyles, consumption, practices, and technological innovations. In this essay, I will discuss how the ‘sponge city’ model pioneered by Peking University Professor Konghian Yu is an economically viable pathway to transform Asian megacities into spaces that produce less carbon, have adequate clean water access and protection against rising tides, and better social, environmental, and public wellbeing.

The idea of the sponge city began when Konghian Yu was receiving his Doctor of Design Degree at Harvard University. His dissertation, which explored ecological security through landscape planning in South China, laid the foundation of his pioneering concept of designing and redesigning cities based on environmental ethics.

“Floods are not enemies,” explained Professor Yu to the World Economic Forum. “We can make friends with floods. We can make friends with water.”

Yu’s philosophy is that cities are prone to flooding because there is nowhere for water to go. Grey infrastructure, made of concrete and steel, cannot absorb large amounts of water, and use it to improve life of the city’s inhabitants. In addition, building grey infrastructure is carbon-intensive, creates pollution, depletes green spaces, and degrades natural ecosystems. Sponge cities, however, are cost-effective, nature-based solutions to traditional grey infrastructure. Made from green or blue-green infrastructure defined as ‘building with nature,’ components include vegetative parks, permeable pavements, and urban forests. Sponge cities reimagine urban environments as working with rather than against rainwater, stormwater, and floodwater, which are captured, controlled, and reused to replenish aquifers, irrigate urban farms, flush our toilets, and be processed into drinking water.



Following Beijing’s disastrous flooding in 2012 that claimed dozens of lives, the Chinese government launched the Sponge City Initiative in 2015 with 16 “model sponge cities,” later expanded to 30. Wuhan, the largest city in central China and one of the pilot cities, has emerged as China’s “leading sponge city.” Wuhan’s experience designing and implementing a Sponge City Program (SCP) provides valuable lessons for other Asian megacities looking for practical ways to adapt to the climate challenge.

*View of flood-prone Wuhan, China. Photograph: Sino/Getty*



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The economic case for adopting SCP is strong and is further bolstered by a host of other social, environmental, and health benefits. According to a cost analysis by the Coalition for Urban Transitions, Wuhan's project of converting a rubbish dump into an urban "sponge" was US\$600 million cheaper than a traditional grey-infrastructure project, while the value of land surrounding the project doubled after it was completed. The project is 30 square kilometers and collects 70% of rainfall, saving the city US\$220,000 per year in watering posts. In 2019, researchers from Stockholm Environment Institute Asia commented that Asian cities are "mired in policy inertia when it comes to climate action". For example, the Indonesian government has committed US\$40 billion in 2019 to save 30 million people living in Jakarta from rising sea levels and increasingly severe floods. However, no comprehensive plan has been released by the government about how the megacity will be redesigned. Implementing an SCP, which has been tested in more than 250 cities in China, India, and Russia already, may be the most cost-effective method of redesigning megacities over relatively short timespans (Wuhan's project was completed in three years). SCPs also offer megacities a pathway to meet the United Nations 2030 Sustainable Development Goals (SDGs) of improving human well-being (SDG3), offering clean water and sanitation (SDG 6), building sustainable cities and communities (SDG 11), adapting and mitigating climate change (SDG 13) and improving the health of ecosystems (SDGs 14 and 15).

While many Asian megacities face the common challenge of adapting to climate change and large-scale urbanization, megacities also face specific challenges depending on meteorological and hydrological conditions, migration patterns, coastal exposure, and the existing built environment. SCPs have proved themselves versatile, able to cater for different urban landscapes across countries and continents. Wuhan's implementation of its SCP provides a valuable lesson for Asian megacities looking to tailor SCPs to their built environments. In 2015, the Chinese national government provided Sponge City Application Guidelines, Technical Guidelines, and other documents to guide private sector involvement in local projects across pilot programs in China. These documents were foundational for local SCPs, and Wuhan's success lied in applying national guidelines to the local context to produce its own planning document, the Planning and Design Guidelines for the Sponge City Program. While Wuhan was able to successfully adapt national guidelines to suit the local context, China's nationally-imposed sponge city model has been criticized for a lack of flexibility and for not allowing local goals to be incorporated into SCPs. These mixed results are a lesson for megacities across Asia that building successful SCPs requires national-local cooperation within countries, as well as inter-Asian initiatives involving the public and private sector to establish best practices for SCPs.

Currently, there are a variety of disparate efforts scattered across the public and private sector working on sponge city designs in current or emerging megacities. Architects at Landprocess are experimenting with sponge technologies in Bangkok to conserve water in the monsoon season and prevent flooding. The Indian city of Hyderabad has also adopted sponge city planning as central to its urban redesign project. Interest in implementing SCPs across Asia to future-proof megacities and protect urban inhabitants is a pivotal first step in confronting Asia's biggest challenge over the next decade. Sponge cities symbolize a shift away from "greenwashing" toward more effective urban planning and governance. However, blindly adopting China's guidelines or the "Wuhan model" will result in SCPs that are not optimized to their settings. Just as Wuhan converted a rubbish dump into a sponge by building parkland, urban forests, and permeable pavements, other megacities, such as my home Mumbai, may choose to approach SCPs differently by integrating already existing slum-relocation projects into versatile SCPs of various kinds. One of the installations at the Museum of Fine Arts, Boston, Hema Upadhyay's 8' x 12', showed an aerial view of Mumbai's urban density, packed with informal settlements, skyscrapers, and religious centers. She challenges the existence of a "typical" Asian city by depicting Mumbai's challenge with urbanization and regionalization, reminding us that Asia's megacities occupy dramatically diverse built environments demanding unique design solutions.



Hema Upadhyay's 8' x 12', Museum of Fine Art, Boston  
(Source: Times of India Blog)

Designing SCPs that are optimized for Asia's varied megacity landscapes requires cooperation from various stakeholders, programs, and jurisdictions. SCPs will not always be contiguous across Asian megacities, as Wuhan's 30 square kilometer project was. Creative, localized approaches coordinated across national and local government agencies and private sector actors will ensure the best results for "sponge-ifying" megacities. For example, Singapore's "mandatory roadside plantings" policy has provided tree cover across the city through the private sector despite urban growth. SCPs provide flexibility to governments to retrofit sponge designs where necessary through innovative policy solutions and urban planning. Each megacity must holistically consider how best to incorporate sponge elements into its existing urban environments, and this can be best achieved through comprehensive information sharing platforms with open, transparent data from governments and private firms across Asia.

Asia needs a “Blue and Green Cities” initiative. The stakes are too high for Asian countries to act in isolation when disparate, innovative initiatives are already underway. Cross-fertilization of ideas, technologies, and human capital will benefit the interconnected economies, societies, and future of Asia. Climate change is the biggest challenge that Asian countries will face individually and collectively in the next decade. Investing in livable megacities where millions of urban dwellers are vulnerable to extreme weather events should be the top priority of national governments and Asian regional initiatives. Asian megacity economies are already larger than the economies of single European nations. Tokyo’s US\$1.5 trillion economy is larger than Spain’s US\$1.42 trillion, while Shanghai’s US\$495 billion economy is larger than Norway’s US\$439.5 billion, meaning that vast amounts of economic and human capital are concentrated in Asian megacities. Futureproofing them against climate change should be Asia’s priority in the lead up to 2030. SCPs provide an economically viable option for megacities that can be achieved in the short-term while providing long-term protection against climate change and a transition to lower-carbon societies. They are one part of an evolving answer to the question artist Han Seok Hyun asked at the Museum of Fine Arts, Boston in his Super-Natural greenscape. Finally, the long-term social, environmental, and health benefits that inhabitants receive from SCPs cannot be quantified — they make megacities more prosperous, more productive, healthier, and happier urban homes.

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## From a City-scale Beauty Pageant to a Continent-wide Diversified Gallery

**Cities and Urban Development**





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# From a City-scale Beauty Pageant to a Continent-wide Diversified Gallery

Never can we underestimate how Asians love shopping! We are home to 14 out of the 20 largest shopping malls in the world. Let me introduce you to some of the winners:

In the top seven we have 1 Uthm from Malaysia, with over 5 million square feet of leasable area and the largest rooftop garden in Southeast Asia.



Fig. 1 & 2 – Interior and rooftop garden of the 1 Uthm

Our third runner-up goes to SM City North EDSA from Philippines, with close to 5.4 million square feet of leasable area and again featuring a Sky Garden.



Fig. 3 & 4 – Interior and Sky Garden of the SM City North EDSA

And now finally, please applaud our champion, the South China Mall from China with 6.6 million square feet of leasable area, and once again, an outdoor garden.



Fig. 5 & 6 – Interior and outdoor area of the South China Mall

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The winning recipe is clear. First, we need to be big—in fact, enormous—to earn the titles. To drive traffic and sales, we incorporate intricate escalator networks, bright lighting, and international household brands. Without the trouble of going to the directory, it is safe to assume that there is a green open area.

It begs the question—unless you live next to one of them, you probably cannot tell the difference between our top 20. Are these the malls you wish to visit in any part of Asia in the next 10 years and beyond?

Now let's walk to the next block, the city-pride skyscraper. We love skyscrapers, generally defined as buildings over 100-metres tall, as they are masterpieces and symbolize our prosperity. We hear phrases like, "There are no more than 6000 buildings this tall on earth, and there's one in my city!"

But we might as well think again. There are over 300 skyscrapers completed around the world every year. Ten years later, the phrase "my city is one out of 10,000!" might be getting less impressive than before.

To house 70% of the largest malls and 63% of the tallest buildings is not a coincidence. The underlying issue lies in every city competing in the dimensions of size and height, as if they are the key performance indicators of a "successful" city. In that sense, there can only be one winner. Worse still, the champion will be quickly replaced by the thousands of younger, taller, and more advanced buildings waiting in line.

How did we get here? Asian cities have performed miracles in catching up with the West through industrialization and exports. We had an unfettered urge to join the class of developed cities through modernization. Being enormous and tall are our entry tickets.

By no means can we disregard the progress made so far, from poverty alleviation to infrastructure networks and technological advances. But the upcoming decade is a different story as we move beyond basic necessities. The majority of cities will lose the cost advantage in labour and resources. In fact, it is already happening as China exports 60 million manufacturing jobs to Africa. As we reduce our reliance on low-cost manufacturing, our cities are in dire need of developing a distinctiveness that better serves the people and sustains global competitiveness.

The danger of sameness goes far beyond whether cities look aesthetically similar. If we have a singular mindset on buildings, we could fail outright. Take the South China Mall. It was more famously known as the "Ghost Mall," the largest mall with a tenant occupancy rate below 10%. City leaders and developers were hastily looking to replicate the success of world-class mega-malls without thorough customer understanding. It was not until recent renovations focused on residents, such as including family-friendly facilities, that the occupancy rate recovered.

If we have a singular mindset on priority sectors, we could forever trail behind our role models. Suppose an Asian city wished to become a financial city with a lucrative stock market. This city would see that there are already well-established trading

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hubs in the region such as Hong Kong and Tokyo. Their institutional frameworks and talent development are meticulously planned to sustain their competitiveness. The city starting afresh lacks a strategic advantage, such that the match is like David facing Goliath, only this time the Goliath is also cautious about the other Goliaths (and Davids) around.

If we have a singular mindset on development, we may lose our identity. What are we most proud of about our cities? That they are food paradises? Or home to skyscraper landmarks? The alarming truth is that people from different cities like Shanghai and Singapore might have shared the same answers and are unable to articulate how their cities are distinctive. We are not much different if we started modernizing at the same time, at the same pace, and using the same pathway. If we the citizens feel this way, our tourists are only more confused. There might not be a sound reason to visit identical cities and there is absolutely no need to visit either of them again. Our tourism and workforce will therefore suffer.

Most importantly, if we have a singular mindset on problem solving, we will be impotent in actually solving any problems. Whether it is climate change, rapid urbanisation, or food shortages, the list of universal challenges goes on. Something as simple as plastic is manufactured using different raw materials and technology in the East and West, meaning that copying others' solutions in waste reduction would not yield the desired results. Thus, our mindset is of the most fundamental importance, rather than the problems we are trying to solve. We cannot apply the same methods as others without taking into account the uniqueness of Asia, our individual cities, and our cultures.

It becomes clear that planners can no longer peek at and paste our neighbours' blueprints. We have to match the market with our unique strengths and contexts and draw our own master plans. The simple answer is utilizing our respective strengths. The tricky question is – how?

### Answer 1 – Know ourselves, and know our frenemies better

Back to our financial hub case. What can David do? With Hong Kong and Shanghai standing firm in the leading positions, multiple Chinese cities have found the answer by specializing in niche segments within the financial industry. Beijing takes advantage of its close ties with the central government and becomes the headquarters of financial institutions; Shenzhen, having positioned itself as a financial innovator, continues to attract global STEM talents; and Qingdao is working toward being an international wealth management centre. Through conscientious division of labour, the Davids find ways to complement and seize the spill-over benefit from the Goliaths.

### Answer 2 – Learn from others smartly

Learning from others' experiences could save us from many troubles. But such learning is not blindly taking others' answers as our own, but rather understanding the factors in their success and carefully evaluating whether those factors apply in our own unique contexts.



The means of learning has grown exponentially with technology advances. In particular, collaborative data analytics projects among cities, such as Bloomberg's "What Works Cities" program, have unlocked huge potential for evidence-based decision-making. Sharing data with fellow cities can reduce the biases inherent in zooming into a handful of successful examples and promote healthy competition to create more livable cities. Bloomberg's pilot in the United States has already shown promising results such as increased workforce diversity. Can we build a database in our country and take it further to integrate with those in Asia, and the world?

### Answer 3 – The people know best

Cities are built for and run by the people, who should have a say in where the cities are progressing toward. Through civic participation, we can get people excited about collectively envisioning a city's future. The Nagara Rimba Nusa Design Contest is a fine example in Indonesia on crowdsourcing ideas for the new capital city. The point may not be to identify the best amateur architect, but to launch a data-collection project to uncover what the people have in mind. Patterns then emerge on what are the people's greatest concerns and desires for the cities we share.

What I like most about the winning design for Nagara Rimba Nusa is its leverage on the natural environment. The name "Forest Archipelago City" suggests that the city is in harmony with the surrounding forest. The natural green infrastructure provides cooling, flooding protection and retreat for the residents. One cannot find the most expensive mall or the tallest tower as all buildings are cohesive to the environment and with each other.



Fig. 7 - Design for the Forest Archipelago City, Indonesia

In Phuket, Thailand, people and hotels had united in protests against over-tourism, believing the "paradise island" was broken by the craving for profits. Indeed, modernization and tourism have made much of the city irrelevant to the humble working class. The luxurious shopping malls that serve the tourists rather than the locals are also systemically vulnerable and they have paid the price as tourism halted under the Coronavirus pandemic.

But there is a silver lining. Without tourists, city planners and developers can now shift their focus back to the locals, and they could rediscover the unique elements that have defined Thailand. Maybe it is the immersion of Buddhism in everyday life, or maybe it is the ripe tropical fruits and delicious recipes. To find out, we need to cast away our assumptions on "modernization" and open our eyes.

Cities that tie development to their cultural and environmental uniqueness are those that would be remembered and loved by locals and visitors alike. They are the cities that can sustain their competitiveness because no one else can imitate them. And I trust that I will find many of them flourishing in Asia in the near future.

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# The Neglected Effects of Gender-based Violence towards Jakarta's Urban Walkability

**Cities and Urban Development**



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# The Neglected Effects of Gender-based Violence towards Jakarta's Urban Walkability

## Introduction

The bustling capital city of Jakarta, Indonesia is known for its rapidly developing urban mobility with the recent launch of the Mass Rapid Transit (MRT), Light Rail Transit (LRT), and many more public transportation mega-projects under construction. While adding new ways of commuting, there is one simple mode of transportation that can holistically strengthen a city and its citizens: walking. Jeff Speck, a prolific American city designer, advocates the concept of walkability as a step towards solving the environmental, health, and economic challenges of a city. The benchmarks established by Speck are reflected in "Jakarta Walkable 2022," a vision initiated by the non-profit organization Institute for Transportation Development Policy (ITDP) and the Regional Road Offices of Jakarta, a government agency. This initiative is a response to the unfavorable circumstances pedestrians continue to face, including but not limited to poor sidewalk conditions, the improper usage of sidewalks, and a lack of road safety. These conditions have resulted in citizens walking an average of just 3,513 steps a day and have placed the city at a walkability rating of 48, which is considered not walkable.

With the vast amount of resources and data available to guide action towards improving walking conditions, a void of local research remains when it comes to one of the biggest overlooked factors contributing to the pressing state of urban walkability--sexual violence against women. The Coalition for Safe Public Spaces (2019) collected data from more than 62,000 participants and found that 3 out of 5 women have been sexually violated in a public space. 28.2% of these incidents happened while walking on public streets. When women make up 49% of the population but are 13 times more likely to experience sexual harassment and violence in public spaces, this gender-based factor limits the potential for greater city-wide walkability. This essay presents achievable solutions to boost Jakarta's walkability by mitigating the vulnerability of women pedestrians.

## Present Urgency for Walking

The General Theory of Walkability as pioneered by Jeff Speck introduces four conditions for a city to be considered walkable. Firstly, useful, which indicates that most aspects of daily life are close at hand and well-organized. Secondly, safe, which means that streets should be designed not only to be safe but also feel safe for pedestrians. Thirdly, comfortable, which envisions urban streets as "outdoor living rooms" where buildings and landscapes attract pedestrians. Lastly, interesting, which means sidewalks are lined by unique buildings with friendly faces to incorporate a sense of humanity into the urban design. While Speck organizes a rather abstract theoretical framework, the Victoria Transport Policy Institute states four concrete indicators of walkability including the quality of pedestrian paths, connectivity of



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pedestrian paths, safety, and lastly, density in conjunction with accessibility. Based on these two foundations of walkability, the present reality of walking in Jakarta still clearly does not satisfy the conditions and indicators of a walkable city.

According to the latest official statistics, only 560 of 6,956 kilometers of roads in Jakarta are equipped with sidewalks, resulting in merely 8% of Jakarta being walkable (excluding bridges). This disproportion affects pedestrian safety. Unfortunately, one pedestrian dies every 6 days in Jakarta. Regarding physical health, with 3,513 steps a day being the national average, obesity impacts more than 40% of Jakarta citizens. However, walking might not be the healthiest option with air pollution levels reaching as high as 125 micron grams per cubic meter, which far surpasses the safe limit of 10–25 micron grams. These are macro-level disadvantages that affect the walkability of Jakarta. In addition, from a pedestrian standpoint, there are micro-level issues that directly affect walking in Jakarta. City natives Tanan, Wibowo, and Tinumbia measured walkability in selected urban areas very similar to the conditions of Jakarta. The researchers found that pedestrians mostly demanded sidewalk repairs, increased cleanliness, wider sidewalks, and supporting facilities, namely trees and benches, for comfort.

These macro- and micro- level factors are all considered in the formation of the “Jakarta Walkable 2022” plan that aims to realize the four characteristics of a walkable city. The first characteristic is completeness, which involves the effective construction of walkways and crossings, access to transit, complementary uses, access to food, and access to public spaces. The second characteristic is safety, which involves speed, lighting, bollards, driveway density, pedestrian refuges, sidewalk extensions, and curbs. The third characteristic is comfort, which includes the structuring of shades, shelters, active frontage, permeable frontage, seating, plants, waste bins, and landscaping. Lastly, the fourth characteristic is humane design, which involves tactile features, wayfinding, signage, and ramps. Although gender was briefly, and only descriptively, mentioned in discussing the fourth characteristic, this list of reformative measures still fails to recognize the prevalence of violence against women in Jakarta that trickles down to affect walkability. Comprehensive data from a gender lens can be significantly supplemented to bring about change and advance equality.

## Addressing Violence

To address gender-based violence as a threat to urban walkability is to question whether the current and future state of walkability can truly benefit women. Even if the visionary goals of “Jakarta Walkable 2022” are fulfilled, can women enjoy the new facilities when gender-based violence is still publicly rampant? In the process of moving from one city location to another, women encounter barriers and constraints that result in routine, almost automatic, personal adjustments to ensure our safety. In Jakarta, the norm for women has always been to take a different route, get home earlier, or splurge on a taxi to meet our security needs. It should never be forgotten that security is a basic and fundamental human right. Thus, in the case of women pedestrians in Jakarta, there is a massive lack of protective and preventive measures in place that would allow for fearless walking. The Coalition for Safe Public Spaces recorded the types of sexual violence often experienced by women in public spaces,

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such as catcalling, comments on women's bodies, touching, sexist comments, aggressive disruption of personal space, groping, vulgar gestures, stalking, exhibition of genitals, and more. Loukaitou-Sideris conducted a qualitative study that found a consistent fearful attitude in women toward public spaces. The study proves that fear of sexual violence in public spaces leads to behavioural adjustments made by women that eventually affect their urban mobility. Women's reluctance to walk affects the effectiveness of city walkability initiatives. Additionally, the research done by Stanford that found Indonesians walk an average 3,513 steps per day also stated that the activity inequality is caused by a nationwide gender gap, where women are less active than men.

### Solution for Women's Walkability

For Jakarta, the solution has once been proposed by the former Governor Basuki Tjahaja Purnama. This proposal came as no surprise, since the former Governor was known for utilizing innovations for Jakarta's urban infrastructure. The former Governor aimed to implement a digital data system specifically engineered to alleviate sexual violence against women, Safetipin. This advanced social technology works to create safer and more inclusive cities for women by collecting data from three mobile phone applications. The data acquired are in the form of safety audits by users rating the lighting, openness, visibility, people, security, walking path, transport, gender balance, and feeling of a certain area. Safetipin is already available in the Indonesian language, yet since the election of the current governor, the Safetipin proposal has not seen any further progress.

By putting a readily available innovation into action, Safetipin can give us the necessary data to identify which particular areas need to be renovated for the safety of women. Some indicators, such as lighting, openness, and visibility, intersect with the characteristics in the "Jakarta Walkable 2022" vision, but other indicators, namely gender, feeling, and security, can positively diversify the goals of "Jakarta Walkable 2022." Safetipin's safety audits have the advantage of interpreting the social usage and gender diversity of a certain area, which can aid interventions to improve the area's walkability. Safety audits can be further applied to street design, policy making, and ultimately to achieve a walkable city where women are not bound to gender-based limitations.

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