



Inquiry: Design of a Sustainable Financial System



FINANCING FOR DEVELOPMENT

Aligning the Financial Systems in the Asia Pacific Region to Sustainable Development

ASIA-PACIFIC HIGH-LEVEL
CONSULTATION ON FINANCING
FOR DEVELOPMENT



April 2015, Jakarta

The Inquiry

The Inquiry into the Design of a Sustainable Financial System has been initiated by the United Nations Environment Programme to advance policy options to improve the financial system's effectiveness in mobilizing capital towards a green and inclusive economy—in other words, sustainable development. Established in January 2014, it will publish its final report towards the end of 2015.

More information on the Inquiry is at: www.unep.org/inquiry/ or from:

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This Briefing

This briefing has been produced by the UNEP Inquiry as a contribution to discussions at the Regional Consultation on Financing for Development in Asia and the Pacific taking place in Jakarta, Indonesia from 29-30 April 2015. It draws on the Inquiry's ongoing research, and country engagement as laid out in more detail in two recent publications *Aligning the Financial System to Sustainable Development: Insights from Practice* (2014) *Aligning the Financial System to Sustainable Development: Pathways to Scale* (2015), both available from www.unep.org/inquiry/.

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CONTENTS

FOREWORD	4
SUMMARY	6
OPTIONS FOR ACTION	8
1 SUSTAINABLE DEVELOPMENT IN ASIA PACIFIC	10
1.1 Asia-Pacific's Financing for Sustainable Development	12
2 ASIA-PACIFIC'S FINANCIAL SYSTEMS	16
2.1 Financial System Gaps and Challenges	18
3 ALIGNING THE REGION'S FINANCIAL SYSTEM WITH SUSTAINABLE DEVELOPMENT	20
3.1 Leadership by Individual Financial Institutions	21
3.2 Emerging Policies, Regulations and Standards	26
3.3 Systematic Approaches	27
4 ACTIONS TO ADVANCE ASIA-PACIFIC'S SUSTAINABLE FINANCIAL SYSTEMS	29
4.1 Options for Action	29
4.2 Need for International Cooperation	31
4.3 Concluding Remarks	32
ENDNOTES	33
OTHER RELEVANT INQUIRY PUBLICATIONS	34

Foreword

As home to over half of the world's people, but much less than half of its natural resources, achieving inclusive, sustainable economic prosperity in the Asia-Pacific region depends on the health of the environment. Yet stocks of 'natural capital' (including non-renewable resources, forests, agricultural land and fisheries) are in decline across the region, and have dwindled by between third and a half in most countries of the region over the past five years.

Reversing this trend to realize sustainable development depends on finance flowing towards efficient, clean and inclusive economic activity and away from those activities that make the situation worse.

It is estimated that in the Asia-Pacific region some US\$2.5 trillion is needed in annual investment for sustainable development – to close gaps in basic services and infrastructure and to protect the environment, enhance energy efficiency and respond to climate change. Further finance is needed for industrial upgrading, including by SMEs to enable more and better jobs to be created. As the 'zero draft' of the outcome document for the third International Conference on Financing for Development notes, innovative financial and capital market policies, regulations and standards that can align private capital flows to the financing needs of sustainable development will be crucial to mobilizing resources on this scale.

The region's savings, US\$8.4 trillion in 2012, make up more than half of the world's total savings. Advancing sustainable financial systems can enhance the efficiency, effectiveness and resilience with which financial and capital markets channel these resources, delivering both returns to savers and the investment needed for economic growth and transformation. Yet today only 0.8% of assets under management in the region are invested to according sustainability criteria. At the same

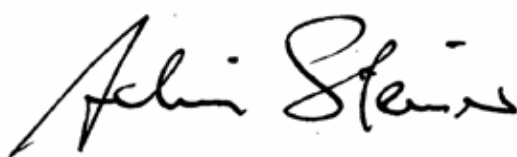
time, in East Asia, 45% of adults lack access to the formal financial sector, and in South Asia the figure rises to 66%.

However, research and engagement by the UNEP Inquiry has found that the Asia-Pacific region is one of the most active in innovating towards a sustainable financial system. New green disclosure requirements are being adopted across banking and capital markets. Green credit guidelines are being introduced by banking regulators. Sustainability indexes and benchmarks are becoming established in securities markets, and credit rating agencies are beginning to incorporate climate risk into their solvency analyses. Innovations in micro-finance including mobile-money are seeking to close the gaps in access to finance.

Countries such as China, Indonesia and Japan are also demonstrating leadership in taking systematic approaches to developing and embedding green finance principles across the financial system. Putting sustainable development at the heart of financial and capital markets does not represent an ‘additional’ performance measure for Asia-Pacific’s financial markets. Quite the contrary, it improves the availability of material information, enhances the all-important task of risk-pricing and advances the efficiency of credit and capital allocation.

This briefing developed by the UNEP Inquiry into the Design of Sustainable Financial System provides practical recommendations for the steps that countries can and are taking in the region to align financial governance, incentives regulation, policy and standards towards sustainable development.

But international cooperation is also crucial. In developing a new ‘Global Framework for Financing Sustainable Development’ through the Addis Ababa Accord, the international community could to include measures that seek to align the investment chain towards long-term performance and sustainability, recognizing that our prospects for success in achieving sustainable development goals depends on the this investment chain being effective, efficient and resilient.



Achim Steiner
Under-Secretary-General
Executive Director, UNEP

Summary

Adequate, appropriate finance is crucial for sustainable development in the Asia-Pacific region. The United Nations Economic and Social Commission for Asia and the Pacific UN (ESCAP) estimates that the region needs to invest around US\$2.5 trillion a year between 2013 and 2030 to achieve key sustainable development goals:

- ⊙ US\$500-800 billion to close gaps in education, health, employment, social protection and basic access to energy services.
- ⊙ US\$800-\$900 billion for developing infrastructure for energy, transport, telecommunications and water and sanitation.
- ⊙ US\$500-800 billion for climate change mitigation and renewable energy.

The region's developing financial and capital markets provide a unique opportunity for innovative financial and capital market policies, regulations and standards that can align private capital flows to the financing needs of sustainable development. Notably, the region's savings, US\$8.4 trillion in 2012, represents more than half of the world's total savings, the channeling of which will make a significant difference to regional and international progress towards sustainable development.

Sustainable finance in Asia, as well as elsewhere, has to date mainly concerned the actions of individual financial institutions, sometimes encouraged and supported by voluntary associations and principles. But sustainable finance is more than a set of individual actions. Work has now entered the next phase of designing the key parameters for the financial system as a whole.

Advancing sustainable financial systems can enhance the efficiency, effectiveness and resilience of the region's financial and capital markets. Placing sustainable development at the heart of financial markets does not represent an 'additional' performance measure. Quite the contrary, it improves the availability of material information, enhances the all-important task of risk-pricing and advances the efficiency of credit and capital allocation. Moreover, by increasing the flow of finance into the enablers of a healthy dynamic, inclusive and sustainable economy, it secures higher, long-term, risk adjusted returns, and improves the resilience of the financial system itself.

The UNEP Inquiry into the Design of a Sustainable Financial System has identified clear potential roles of central bankers, financial regulators and financial policy makers in delivering financing for sustainable development, including specific examples from several countries in the region such as Bangladesh, China, Indonesia and Singapore.

Establishing national coordination mechanisms for ambitious, collective action is a critical enabler for advancing a sustainable financial system. National strategies and pathways for reform and innovation need to reflect particular needs and challenges. The region includes some of the world's largest and smallest, and wealthiest and poorest nations. Similarly its financial systems range from countries with small, under-developed banking communities to those with mature, internationalized capital markets and diversified, sophisticated financial actors. National coordination mechanisms include Indonesia's 'Roadmap for Sustainable Finance', China's recently established Green Finance Committee, overseen by the People's Bank of China, and Japan's working groups on Principles for 21st Century Finance.

International cooperation and coordinated action is key to advancing national and regional action for establishing sustainable financial systems. International financial governance remains fragmented, although the response to the global financial crisis demonstrated the will and capacity of the international community to act collectively and ambitiously. Shaping a sustainable financial system presents another opportunity for strong collective international action—action that could yield essential long-term sustainability benefits. The UN's Financing for Development process offers one means for enhanced international cooperation, to support the achievement of sustainable development goals. Beyond this, however, are a number of relevant international institutions responsible for macro-economic guidance and financial market development, which should be involved in setting the direction, pace and overall ambition and in establishing standards.

Options for Action

WHILE RECOGNIZING THE CONSIDERABLE DIVERSITY OF THE REGION, THE UNEP INQUIRY INTO THE DESIGN OF A SUSTAINABLE FINANCIAL SYSTEM HAS IDENTIFIED A PORTFOLIO OF DEVELOPMENTS AND POTENTIAL INNOVATIONS WORTHY OF CONSIDERATION BY ALL COUNTRIES IN THE REGION, INCLUDING:

1. **SUSTAINABLE BANKING:** Bangladesh, China and Indonesia have demonstrated the potential for establishing ‘green credit’ risk management and reporting requirements, offering green fiscal incentives and considering variations in capital weightings to account for mispriced environmental risks and broader policy needs.
2. **POLICY-DIRECTED LENDING AND INVESTING:** Policy-directed lending and investing has a mixed performance record. Yet there is considerable opportunity across the region for blending commercial and policy objectives, given the widespread state ownership of both banks and investment vehicles such as sovereign wealth funds, as well as directed lending measures such as those pursued in India. In addition, consideration should be given to instilling more sophisticated, blended credit and investment allocation assessment approaches such as those practiced by leading sustainability investors and banks, –internationally, drawing also on the growing experience of values-based approaches practiced by the Islamic banking community.
3. **GREEN BONDS:** With under-developed but fast growing bond markets, the region has the opportunity to lead in green bond issuance and benefit from the associated use of proceeds for green infrastructure and enterprise development, incentivizing their growing use through fiscal measures, as well as taking an active role in the development of international standards and associated green credit ratings.
4. **STOCK EXCHANGES:** The Stock Exchange of Thailand and others have led the region in requiring listed companies to provide investors with material information about their social and environmental performance, soon to be a mandatory requirement in Singapore’s stock exchange. They have also linked such performance, as does the Indonesian stock exchange, to indexes, benchmarks and associated tracker funds.

5. **LENDER AND INVESTOR LIABILITY:** Environmental compliance can be strengthened where regulatory enforcement is weak by establishing lender and investor environmental liability, now under consideration in China. This approach in turn encourages more effective environmental due diligence and on-going risk management.
6. **MONETARY POLICY:** Low and stable interest rates and inflation clearly incentivize longer-term investment in productive infrastructure and enterprises. In addition, the Bangladesh Central Bank, among others, has demonstrated that non-traditional central bank activities, such as low-cost refinancing of green and rural lending, can improve the effectiveness in achieving traditional monetary policy goals, as well as providing green development support.
7. **PRUDENTIAL OVERSIGHT:** Expected rapid improvements in environmental compliance combined with increased natural catastrophes may create prudential risks, requiring environmental stress testing at the financial enterprise and macro-prudential levels, illustrated by the Bank of England's on-going prudential review of climate-related risks to the UK insurance sector.
8. **CROSS-BORDER INVESTMENT:** The region accounts for one third of global foreign direct investment (FDI) flows, and this share is growing. Enhanced sustainability oversight from originating and host country regulators, such as China's 'Green Credit Guidelines' that cover such flows in principle when emanating from domestically licensed banks, together with dedicated investment authorities, would make a considerable difference.

1 SUSTAINABLE DEVELOPMENT IN ASIA PACIFIC

The Asia-Pacific Region has achieved spectacular growth in recent decades, which has delivered many out of poverty, while significant challenges still need to be addressed. Over the past two decades the region has been the fastest growing in the world. Many countries in Asia have achieved a spectacular economic rise based on domestic savings and export-oriented industrialization, often with a strong role played by state-owned or state-directed financial institutions.

More than half a billion people have been lifted out of poverty and standards of living have risen across most of the region. However 1.6 billion people are still living in poverty, with 800 million lacking access to electricity. The region faces an urgent need to mobilize investment to generate jobs for its young and growing population, and to close infrastructure gaps and build cities that offer a good quality of life.

The next phase of growth must involve a change in environmental management. The previous wave of economic growth was achieved at an environmental cost which in turn led to health impacts, resource shortages, biodiversity damage, and has not yet succeeded in delivering the full potential of widespread prosperity. This pattern of development is illustrated by the analysis of human, produced and natural capitals in developing Asia-Pacific (see box on facing page).

Policy makers increasingly recognize that economic development strategies dependent on unlimited natural resources and unchecked environmental damage are no longer viable because they ultimately undermine economic growth as well. Many countries have made a commitment to 'green growth'; aligning economic strategy to respond to challenges such as resource constraints and water availability.¹ At the same time, the Asian region is the fastest growing source of new greenhouse gas (GHG) emissions and will need to decarbonise energy supplies and infrastructure in order to remain competitive and meet international commitments.²

Countries in the Asia-Pacific region face a diverse set of environmental and social challenges. The region is home to two thirds of the world's population – over 4 billion people – and includes a wide diversity of economies, ranging from mature developed economies and large emerging economies to least developed countries. It includes countries with both relatively high levels of natural capital per person, whose challenge is to manage this sustainably and invest its returns into long-term growth in human capital, and countries with low levels of natural resources whose challenge is to meet the needs of a growing population within ecosystem boundaries.

HUMAN, PRODUCED AND NATURAL CAPITAL

Levels of human capital (skills and education), and of produced capital (equipment, buildings, infrastructure and IP) are rising fast, however absolute levels of wealth per capita remain well below OECD levels.

Yet levels of natural capital (renewable and non-renewable natural resources) are falling from a lower base and in recent years this deterioration has accelerated at a faster rate than the OECD.



[Data source: UNEP and UNU-IHDP (2014) Inclusive Wealth Report]

HUMAN AND NATURAL CAPITAL LEVELS: SELECTED ASIA-PACIFIC COUNTRIES				
		Natural capital per capita		
		High > US\$30,000	Medium	Low < US\$3,000
Human capital per capita	High > US\$100,000	Australia New Zealand	Japan Republic of Korea	Singapore
	Medium	Iran Mongolia	Malaysia Fiji Thailand Indonesia China	Maldives Sri Lanka Philippines Pakistan India Vietnam
	Low < US\$5,000	Papua New Guinea	Lao Cambodia Nepal Myanmar	Bangladesh Afghanistan

[Data source: UNEP and UNU-IHDP (2014) Inclusive Wealth Report]

1.1 Asia-Pacific's Financing for Sustainable Development

The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) estimates that the region needs to invest in excess of US\$2.5 trillion a year between 2013 and 2030 to achieve key sustainable development goals: ³

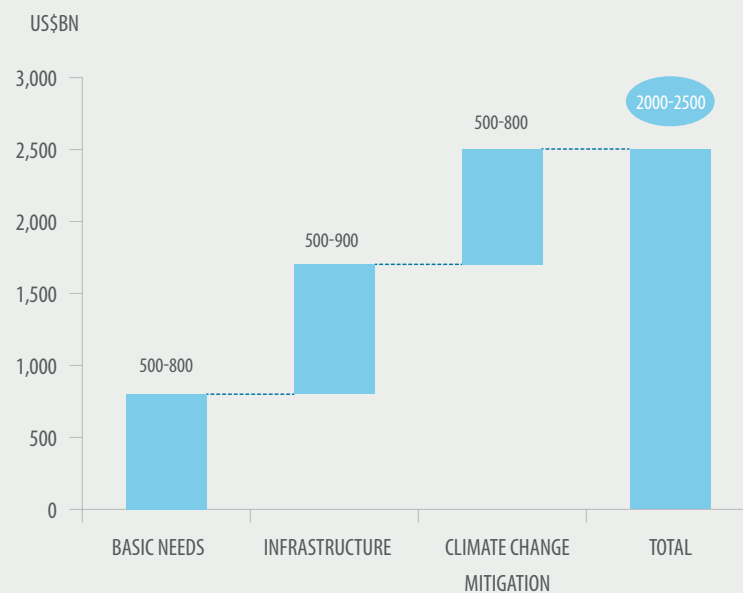
- US\$500-800 billion is needed to close development gaps in the areas of education, health, employment, social protection and basic access to energy services.
- US\$800-\$900 billion is estimated for developing infrastructure for energy, transport, telecommunications and water and sanitation.
- US\$500-800 billion for climate change mitigation and renewable energy.⁴

Underpinning these aggregate figures:

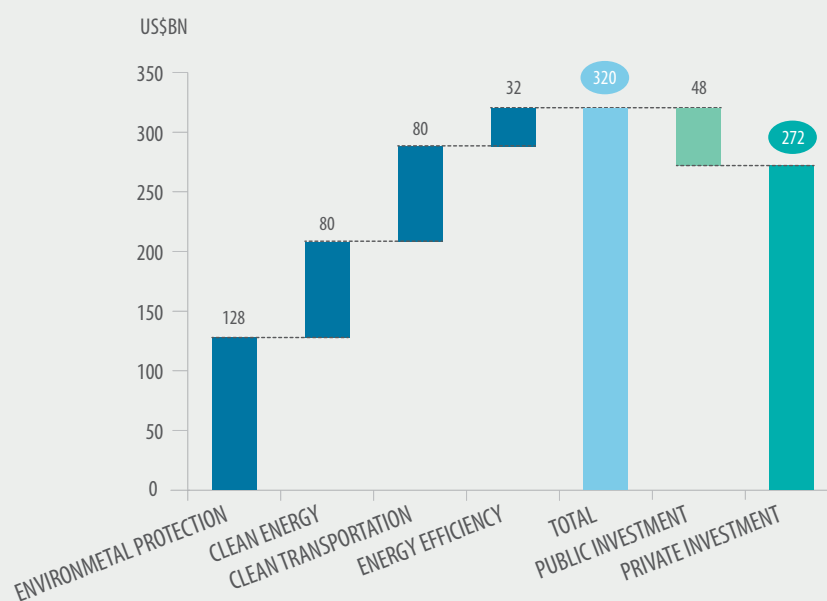
- China alone estimates that it needs some 2 trillion RMB (US\$320 billion) per year for clean energy, energy efficiency and environmental protection, according to the most recent estimates made by the People's Bank of China, and by China's Development Research Centre of the State Council working with the International Institute for Sustainable Development and the UNEP Inquiry.⁵
- The Asia and the Pacific region remains the most disaster prone part of the world, with climate change exacerbating the risks and impacts of natural disasters. From 2003-2013, losses related to natural disasters amounted to US\$750 billion.
- Climate adaptation is estimated to cost US\$25 billion annually between 2010 and 2030.⁶

ANNUAL INVESTMENT NEEDS FOR SUSTAINABLE DEVELOPMENT, US\$ BILLIONS

Asia Pacific – basic needs and environment



China – Environmental protection, clean energy and energy efficiency



[Data source: Akhtar, S. (2014). *Asia-Pacific: Landscape & State of Sustainable Financing*. Bangkok: ESCAP and Green Finance Task Force (2015). *Establishing China's Green Finance System*. Beijing: People's Bank of China/ UNEP Inquiry.]

These aggregate figures conceal the diverse economic situation across the region. For instance, meeting basic socio-economic needs and providing access to modern energy services will require some 3-6 percent of GDP for the period 2013- 2030 in China, Indonesia and India. However, for Bangladesh and Fiji, the figures are 16 and 10 percent of GDP respectively.⁷

In the future, the region's success in meeting the needs and expectations of its citizens, while effectively managing environmental challenges, will depend on its ability to move up the manufacturing value chain and develop modern and competitive service industries. Financial services, including business development loans, and trade finance, venture capital and insurance, as well as stock markets, are critical to this.

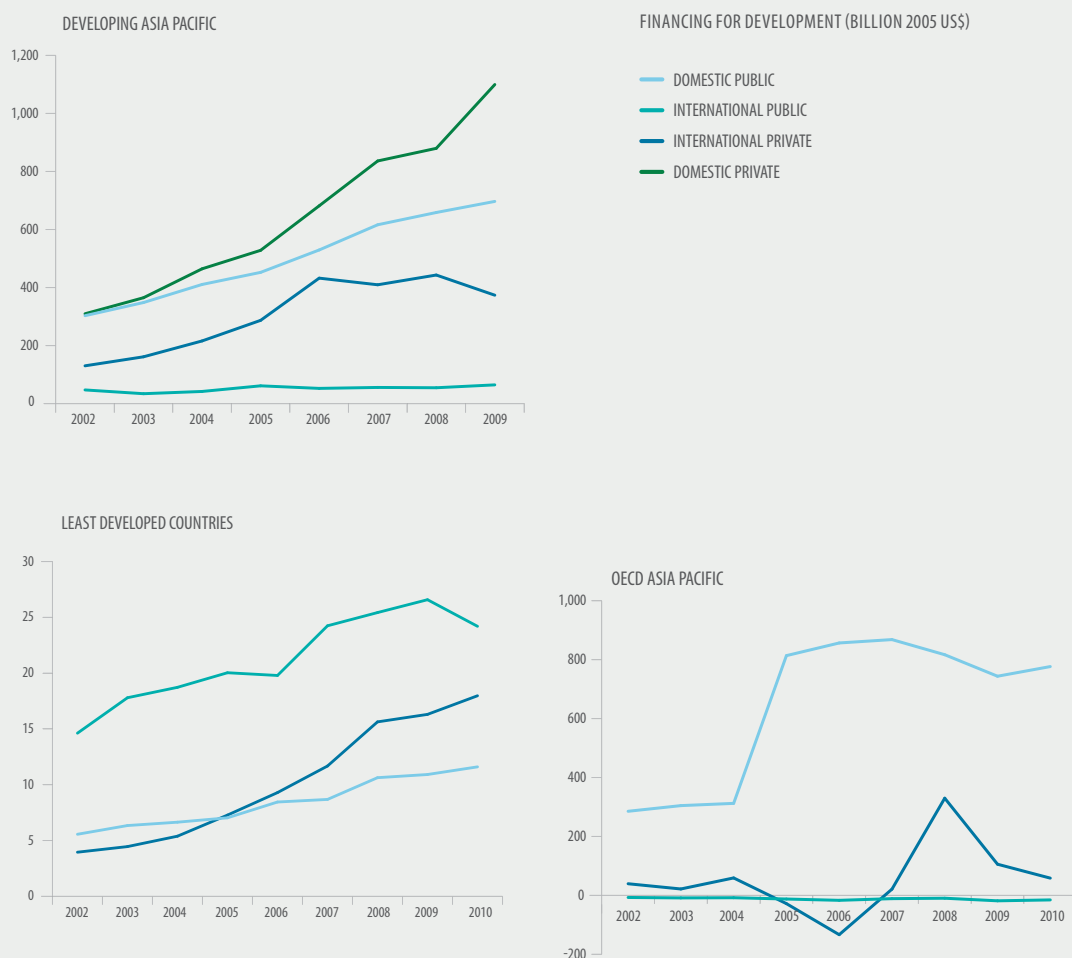
While the region's financing needs are large, so too are current and future financial resources:

- **Domestic-private: savings and investment.** The region's gross national savings amounted to US\$8.4 trillion in 2012, representing more than half of the world's total savings. It also held US\$7.3 trillion in foreign exchange reserves in 2012.¹⁰ High net worth individuals had US\$12.7 trillion in assets in 2012, while the region's mass affluent had US\$20.5 trillion in assets. These values are forecast to increase, respectively, to US\$22.6 trillion and US\$43.3 trillion by 2020.¹¹
- **Domestic-public: tax revenues.** There is significant potential for increasing tax revenues. Central government tax revenues in the developing countries of Asia and the Pacific account for 14.8 percent of GDP, compared with 17.1 percent in Latin America and the Caribbean and 16.3 percent in sub-Saharan Africa. Taxes are only collected from a narrow base of formal sector employees, with many in individuals and businesses not paying tax, whether because they are part of the informal sector, or are covered by tax holidays and exemptions. In Bangladesh, for example, only about 1 percent of the population pays income tax, while in India it is 3 percent.¹²
- **International-private: FDI and portfolio investment.** Asia and the Pacific increased its share of global FDI inflows from 16.2 percent in 1990 to 37.5 percent in 2012 (Some US\$506 billion). However, these flows were highly skewed towards larger emerging countries and resource sectors and generally do not reach least developed countries and fragile states. There have been growing international capital inflows of portfolio investment in equities and bonds – with around a third of the value of local government bonds as foreign holdings.¹³ Potential disruptions caused by the increasing participation of international institutional investors in developing capital markets is a matter of concern, as it heightens their exposure to global financial conditions, contagion and herding.¹⁴
- **International-public: ODA and South-South Cooperation.** Official development assistance (ODA) or aid flows to the region has declined from around US\$32 billion in 2011 to US\$30 billion in 2011, but remains a significant source of development finance for least-developed countries and small island developing States.¹⁵ More aid now takes the form of south-south cooperation within the Asia and the Pacific region, which primarily means the better-off developing countries helping their neighbours. China, for example, is Cambodia's biggest aid donor, as is India for Nepal and Bhutan. Similarly, Thailand is the largest donor to the Lao People's Democratic Republic and the second largest to Myanmar.¹⁶

TAPPING THE REGION'S FINANCIAL WEALTH

- » The region is expected to make up more than one-third of global wealth by 2018, with its private wealth forecast to reach US\$76.9 trillion.⁸
- » Tapping the tax potential in the region could raise US\$440 billion in tax revenues in 17 countries, of which US\$306 billion would be raised in developing countries.⁹
- » Migrant remittances were worth US \$260 billion in 2013, contributing as much as 20 percent to the economies of Kyrgyzstan, Nepal, Samoa, Tajikistan and Tonga.

SOURCES OF FUNDS



EXPLANATION OF CATEGORIES:

Domestic public – tax revenues plus net flows of external debt, public and publicly guaranteed (PPG)

International public – official aid flows as reported by DAC donors

International private – Foreign Direct Investment (FDI), Foreign Portfolio Investments, Remittances, Private Non-guaranteed Debt and Private Charity

Domestic public - calculated on the basis of private and total Gross Fixed Capital Formation, where this is reported (not available for all countries – only sufficient to report for developing Asia)

Developing Asia-Pacific includes Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Fiji, Hong Kong SAR (China), India, Indonesia, Iran, Kiribati, Korea Dem. Rep., Laos, Macao SAR (China), Malaysia, Maldives, Marshall Islands, Micronesia, Fed. States, Mongolia, Myanmar, Nepal, Pakistan, Palau, Papua New Guinea, Philippines, Samoa, Singapore, Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Tonga, Tuvalu, Vanuatu, Vietnam

Least Developed Countries: Afghanistan, Bangladesh, Bhutan, Cambodia, Kiribati, Lao People's Democratic Republic, Myanmar, Nepal, Solomon Islands, Timor-Leste, Tuvalu, Vanuatu.

Asia-Pacific OECD includes Australia, Japan, Korea Dem. Rep., New Zealand

[Data Source: <http://capacity4dev.ec.europa.eu/ffd/minisite/introduction>]-

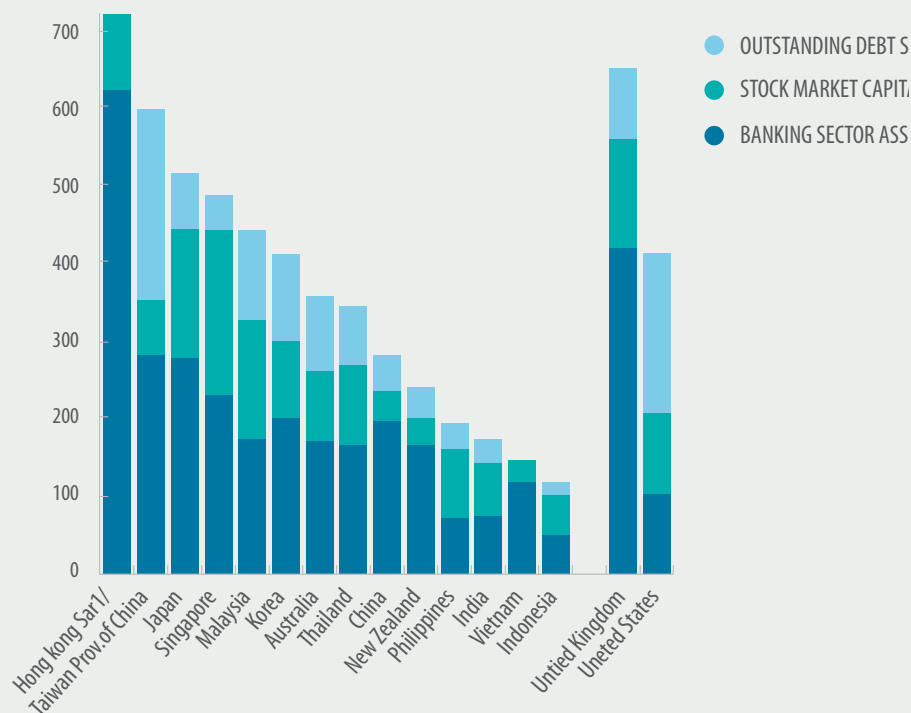
2 ASIA-PACIFIC'S FINANCIAL SYSTEMS

The region's financial system has grown rapidly, but only now are financial and capital markets beginning to mature outside of the region's developed countries. Along with the region's economic success has come an increase in stocks of financial assets and a diversity of nonbank financial institutions and capital markets. However, the region's investment needs have been met largely by domestic (including state-owned) bank loans and foreign direct investment, and through international listings by large corporations. Furthermore, the reach of the region's financial system, especially in low-income and conflict-affected economies, remains at low levels. For example the number of bank branches and automated teller machines, in many countries is very low.¹⁷

Developing Asia has, on average, a banking system that equals 60 percent of GDP, stock market capitalization at 71 percent of GDP, public bond markets at 26 percent of GDP, and private bonds markets at 20 percent. Its financial system is larger than those of other developing regions, but small compared with OECD members.¹⁸

- **Banking** is more dominant as a source of formal capital than in North America, but less than in Europe. Banking still dominates in China, where bank lending makes up 62.5 per cent of credit (with banks as the biggest single owners of bonds and also active in the shadow sector too, so this is likely underestimated).¹⁹ Overall the 50 biggest banks in the region have US\$700 billion in assets, with six of the ten largest Asia-Pacific banks in China, and the rest in Japan.²⁰ Capital adequacy ratios are well above international norms. Even though the banking sector dominates, there are signs of further room for growth, alongside wider financial sector diversification. This can be seen both in the lack of financial access for basic financial services among poor households and SMEs across most of the region, and, at the other end of the scale, the low level of penetration of private banks among the region's growing High Net Worth individuals, who tend to remain with traditional retail banks, family offices and other wealth managers.²¹
- **Stock markets** are an important source of corporate funding in the region, drawing in strong foreign capital inflows. New capital raised by stock issuance in Asia raised US\$198 billion in 2012 (compared to \$234 billion in the Americas and \$102 billion in Europe).²² In total, almost 20,000 companies are listed on the region's stock markets with a capitalization close to US\$15 trillion, making up 31 percent of global stock market value. The stock markets of Tokyo, Hong Kong and Shanghai account for over 50 percent, and market capitalization varies across the region from 156 percent of GDP in Malaysia to 12 percent of GDP in Mongolia.²³ In smaller economies, the breadth and depth of markets is often limited by weak regulatory frameworks and corporate governance, and the consequent lack of liquidity and low level of corporate listings. In larger emerging economies, stock market trading is often characterized by speculation and short-term excessive and volatile capital inflows.²⁴

FINANCIAL SECTOR ASSETS, SELECTED ASIA-PACIFIC COUNTRIES (% OF GDP) 2012



[Source: IMF, 2014, NB: Hong Kong column truncated for presentation purposes- stock market capitalization is 13x GDP, Outstanding debt securities 54 percent of GDP]

- Bond markets** are a small, but growing, source of finance. After the Asian financial crisis, domestic bond markets were developed in many Asia-Pacific developing countries to avoid borrowing in dollars and building up currency mismatches. Between 1997 and 2010 the value of domestic bonds outstanding in China, Hong Kong, Indonesia, Malaysia, Philippines, Republic of Korea, Singapore and Thailand grew from 21 percent to 64 percent of the GDP. Japan is still the largest issuer of domestic currency bonds, but bond issuances from India, China, Thailand, Australia, Pakistan, Republic of Korea and Malaysia are increasing. Almost 80 percent of bond issuances are by governments, however the share of corporate bonds is increasing slowly, with corporations responsible for over 35 percent of issuance in Republic of Korea, Hong Kong, Malaysia, Singapore and China.²⁵ The demand for local currency bonds has been supported by a broadened investor base, including both domestic and foreign institutional investors such as mutual funds, pension funds and insurance companies.
- Institutional investment** - Globally, most of the assets managed by institutional investors are located in the OECD countries. The region's asset managers hold US\$6.6 trillion (less than 10 percent of the assets under management by the world's top 500 asset management firms) while pension funds hold \$3.7 trillion (26 percent of the world's top 300 pension funds). In each case, the vast majority of this relates to the region's developed countries Japan and Australia. However, in the case of pensions, nearly one third is now made up pension funds from major emerging economies. In the category of sovereign wealth funds (SWFs), the Asia-Pacific region has a larger global presence of the world's total assets under management, mainly in China, and Singapore. In addition, smaller countries, such as Timor-Leste and Brunei Darussalam have also used oil and gas revenues to build up SWFs with assets exceeding \$10 billion. Private sector insurance is growing rapidly with nonlife insurance in the region growing by 8 percent annually over past decade. Nevertheless penetration is quite weak and uneven in developing countries in the region.

Against this background of incumbent institutional evolution, the new non-traditional competitors are also emerging, including online investment platforms and peer-to-peer. In China e-commerce players are partnering with asset management companies to offer fund products online. For example, Alibaba launched a Chinese Internet money market fund (Yu'e Bao), which quickly attracted more investors than the country's equity markets and attracted US\$92 billion in deposits. As of 30 June 2014, it was the fourth largest money market fund in the world.

2.1 Financial System Gaps and Challenges

Asia as a whole is a net saver, exporting large amounts of capital to advanced economies. At the same time SMEs, the infrastructure and green economy sectors are identified as underfunded. Foreign investments are also coming into these economies, driven by global liquidity disruptions and market uncertainty, and are increasingly attracted to property, fueling fears of an asset bubble.²⁶ What is constraining the mobilization of the region's savings to meet its own vast investment needs?

Many of the constraints to sustainable investment are outside of the financial system itself, in the economic forces and regulations (or lack of effective regulations) in the real economy. Regulatory and institutional barriers in the real economy often stand in the way of viable long-term investment – this is especially the case in the least developed countries. Perverse signals that are specific to green investments, such as fossil fuel subsidies and weak environmental regulation, continue to hinder investment. In many countries, environmental frameworks are being strengthened and carbon and other ecosystem service markets are being introduced in order to internalise environmental costs (for example in China, New Zealand and Republic of Korea, and under consideration in Indonesia, Thailand and Viet Nam).

“In order for growth to be sustainable, economic development in Asia needs to be resilient to climate change. Capital should be deployed to promote corporate strategies that understand these risks and the management that practices good governance to protect long-term interests. Investors in Asia play a key role in determining where capital should go and their decisions now will have an impact for generations to come.”

Yulanda Chung, Director of the Board, ASRIA²⁷

However, specific weaknesses are also identified in the financial system:

- **Maturity and currency mismatches.** With banks dominating the financial system, funding for long-term infrastructure projects remains based on short-term deposits. At the same time international trade and finance is invoiced and settled in dollars predominantly, and resulting in currency mismatches. Risk management is predominantly carried out by banks holding large amounts of foreign reserves.
- **Under-developed domestic asset management industry.** The region has high savings levels, both among households, high net worth individuals, and nationally by sovereign wealth funds, but has low involvement of the asset management industry in managing long-term savings and investment towards infrastructure. With a lack of high quality safe assets, savings are invested in foreign assets
- **Low levels of financial inclusion.** Despite progress, billions of adults in the Asia-Pacific region still lack access to reliable financial services and suffer from low financial literacy and capability. While over 80 percent of adults in Mongolia and Thailand have an account with a formal financial institution, in Bangladesh and India it is less than 50 percent, and in Pakistan and Cambodia less than 15 percent.²⁸

- **Lack of sound credit assessment.** Inadequate credit assessment systems lead to an acute lack of SME credit, as banks are reluctant to lend to them because of their generally high business risks, and lack of history and collateral. In China, a system chain of mutual guarantees has been established to overcome this, but can lead to several businesses being vulnerable if one defaults on its loans.²⁹
- **Regional fragmentation.** While the regional share of trade is almost 50 percent, regional portfolio investment is only around 10 percent, meaning that the region's financial institutions are more integrated with global markets than they are to each other, missing out on opportunities for effective mobilization of capital and savings within the region, and for pooling of risks and exposing them to international volatility. Lack of harmonized standards for taxation, transactions and investment reduces investor confidence and the flow of capital within the region.
- **Basic financial infrastructure.** Including necessary legal and institutional framework and governance systems, the basic financial infrastructure remains inadequate in most low-income developing economies. Government-backed export credit insurance and guarantee institutions, export-import banks and credit rating institutions are still inefficient or missing in many developing countries in the region. Similarly, credit rating institutions are also weak or absent in some developing countries in the region.

It is clear that the region's financial systems require deepening and further sophistication, and will become so in the coming decades. One estimate is that China's bond markets, for example, will become ten times bigger by 2030 – from just over US\$3 trillion today to US\$32 trillion and that the entire Asian financial system should grow to be more than double the size of the US and Europe combined in 16 years, at about US\$210tn for Asia versus US\$91 trillion for the US and US\$82 trillion for Europe.³⁰ As with the growth of Asia's industries and mega-cities, the key question is how to achieve such a complex evolution at incredible speed, and with alignment to sustainable development.

Given the experience of the Asian Financial Crisis, the 2008 Global Financial Crisis, and the increasing salience and urgency of environmental challenges, the region is wary of creating regional replicas of the existing global financial centers that promote short-termism and speculative forces resulting in instability, financial bubbles and unsustainable development while delivering high returns to the financial sector, but lower benefits to the real economy.³¹ Furthermore it is increasingly clear that in developing the financial sector—more is not always better. If the size of the financial sector itself goes beyond an optimal level, its size can become a constraining factor on the overall productivity of the economy.³²

3

ALIGNING THE REGION'S FINANCIAL SYSTEM WITH SUSTAINABLE DEVELOPMENT

*The key challenge lies in developing the region's financial systems in ways that align the deployment of credit and capital with sustainable development.*³³ Fortunately, many leaders in this field are experimenting with new ways to meet this challenge—through policy, regulatory and market innovations together with standards and fiscal measures, both internationally (see box below) and within the region. This section highlights some of these innovations, drawing on the UNEP Inquiry's international and country-based work in the region, particularly in Bangladesh, China, India and Indonesia (see Country Profiles, pages 22-26).

EMERGING INTERNATIONAL POLICY INNOVATIONS TO ALIGN FINANCIAL SYSTEMS WITH SUSTAINABLE DEVELOPMENT

In Brazil, the government has taken several steps to align the financial system to sustainable development. In 2011, the Brazilian Central Banks asked banks to demonstrate how they consider exposure to socio-environmental damage in the Internal Capital Adequacy and Assessment Process (ICAAP), and in it established a resolution which requires all banks operating in Brazil to demonstrate policies and practices for assessing and managing social and economic risks in their portfolio. To date, it is estimated that around 12 percent of bank lending along with 62 percent of assets under management in the pension system are now covered by policies that require a sustainability assessment. There is potential for the development of a green bonds market in Brazil. In 2011, the Brazilian government gave tax breaks for those investing in notes ('infrastructure notes') issued to finance infrastructure projects in the transportation, logistics, sewage and water treatment, energy, irrigation and telecommunication sectors. Green bonds, including potentially 'forest bonds' for conservation, could fit in this class of notes and projects in Brazil with positive environmental externalities could raise demand for these.³⁴

In South Africa, the post-Apartheid transition led to the development of a pioneering Financial Sector Charter in a bid to address the country's huge gap in financial inclusion, secure confidence in the South African banking system and increase its efficiency. A long negotiation between government, business and labour sought to find a practical way forward between stakeholders wanting to "Make the Banks Serve the People" and a financial sector concerned that the government should not "dictate to financial institutions where to invest...". The Financial Sector Charter that emerged was voluntary, and had the aim of enabling a "transformed, vibrant, and globally competitive financial sector that reflects the demographics of South Africa, and contributes to the establishment of an equitable society by effectively providing accessible financial services to black people and targeted sectors of the economy". The Charter had mixed impacts, for example leading to the development of low-cost Mzansi accounts which have since been superseded by more commercial entry-level banking products.³⁵

In Europe, improving the disclosure of environmental and social risks by corporations was part of the post-crisis financial reform package. Key themes include: modernizing fiduciary duties and improving the integration of environmental and social factors as part of the strategy for long-term finance, introducing environmental stress testing, for example, through the directive on Institutions for Occupational Retirement Provision and boosting the market for 'green bonds' for infrastructure and SMEs.³⁶

3.1 Leadership by Individual Financial Institutions

Since 2011, there has been a steady growth in Asia's sustainable investment industry. According to the Global Sustainable Investment Review, as of the end of 2014, there were US\$53 billion of assets in Asia-Pacific's' (excluding Japan) being managed using one or more socially responsible investment (SRI) strategy, such as negative or positive screening, integration of environmental, social and governance (ESG) factors, sustainability themed and impact investing or shareholder engagement.

Asia's sustainable investment assets have grown by 32 percent per annum since the start of 2012. The largest Asian markets for sustainable investments, by asset size, are Malaysia, Hong Kong and Republic of Korea and the fastest growing are Indonesia and Singapore. The most common strategies used are ESG integration (44%) and negative/exclusionary screening (31%). Both are growing, but outside of Japan, sustainability-themed investing was the fastest growing – increasing by 142 percent over the period.

In terms of regional share of global SRI funds the most significant type from Asia is 'Impact investing' where Japan alone represents over 5% of global volumes. Impact investment is typically made in private markets, and aimed at solving social or environmental problems; providing capital to underserved individuals or communities or financing businesses with a clear social or environmental purpose. In Japan some 81 impact investment bonds have been issued totalling \$9.3 billion, these have focused on addressing climate change, and on vaccines, poverty, water issues and other impact themes.

While, overall, sustainably managed assets only comprise 0.8% of the funds under management in Asia (and Asia only represents 0.2 percent of the global total of sustainably managed assets), it is evident that there has been a positive growth in the sustainable investment industry in recent years. Respondents surveyed by the Asia Responsible Investment Association (AsRIA) highlight fiduciary duty, financial opportunity and risk management as their main motivations.³⁸

A key contributor to the volume of sustainably managed assets in Asia includes funds consistent with Islamic law or Sharia principles. Whether or not to include such assets in sustainable investment analyses is subject to considerable debate. AsRIA notes that assets managed according to Sharia principles require additional screening to traditional asset management. In many instances, these funds have much in common with certain 'ethical funds' using exclusionary principles.

The following table summarizes the main countries with assets identified as Islamic or Sharia-compliant as a proportion of total sustainable investment assets. The majority of these assets are based on exclusionary or negative screening strategies. However, some are also identified as based on other strategies such as ESG integration.

ISLAMIC FINANCE AND SUSTAINABLE INVESTMENT, 2013

	Proportion of sustainable investment made up by Islamic assets
Indonesia	99.14%
Malaysia	99.33%
Pakistan	100%
Asia	37.42%

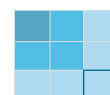
[Source: ASRIA, 2014]

“Sustainable and responsible investing is fast becoming one of the most important investment criteria globally, and in Asia this trend is slowly but surely catching on. Moreover, sustainability is now also an important economic driver for investment performance. The challenge is the establishment and enforcement of consistent standards for sustainability disclosure in order to properly reflect true corporate performance.”

David Li, Fund Manager, Impax³⁷

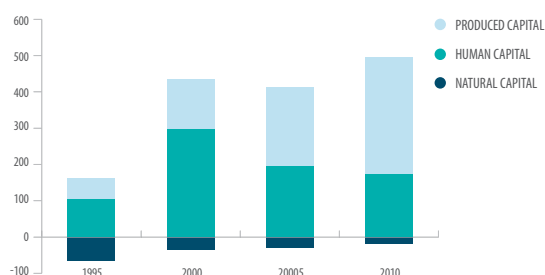
BANGLADESH*

GDP - US\$957 per capita
Savings rate 19%
Low natural and human capital



REAL ECONOMY CAPITAL

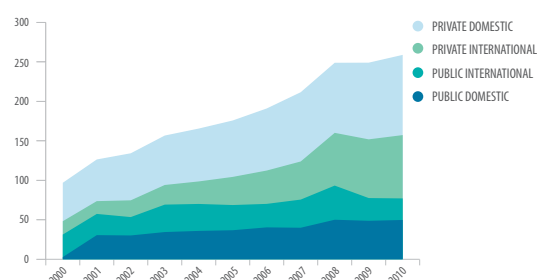
Change capital stock per capita, Current US\$



The economy has been growing steadily, with poverty falling, but infrastructure, law and order, sound and efficient financial market and high-quality social services remain key constraints. The poorest are highly vulnerable to environmental hazards and climate change.

FINANCING FOR DEVELOPMENT: SOURCES AND NEEDS

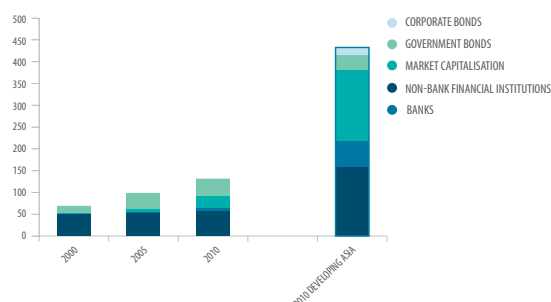
Resources for development, 2005 US\$



Bangladesh has a low savings rate, associated with low disposable income and low financial intermediation. International resources in the form of aid and FDI make up a significant portion of investment.

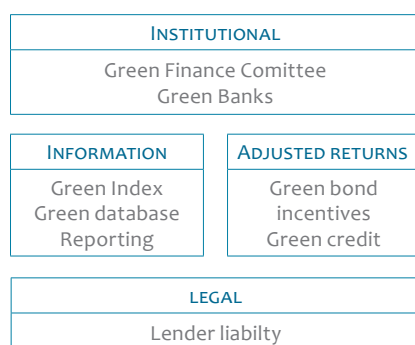
FINANCIAL SYSTEM

Financial assets, % of GDP



Overall the financial system intermediates around \$220 per capita to the private sector annually. Banking dominates, (providing US\$45 billion or around 78% of financing), although only 18% of Indonesian companies make use of formal credit lines and face high interest rates and high rate spread. Institutional investors manage a small volume of assets (10.5% of assets held by insurers, 2.6% by pension funds and 6.4% by finance companies).

FINANCIAL SYSTEM INNOVATION



Bangladesh Bank has taken a leadership role since 2008 in developing policies to integrate sustainable development goals into financial regulation. Financial inclusion is a key priority, and BB requires banks to open 'no frill' bank accounts for small depositors and to expand rural branches. It introducing detailed Environmental Risk Management Guidelines for banks in 2011. To encourage the growth of green finance it provides low interest refinancing for loans on qualifying uses such as solar energy and biogas, and will require every financial institution to allocate at least 5% of its loan portfolio to green finance by 2016. Bangladesh Bank considers financial inclusion within its monetary policy mandate.

FURTHER INFORMATION

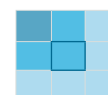
Barkawi, A. and P. Monnin, P, (2015, forthcoming) Sustainability and Monetary Policy: The Case of Bangladesh. UNEP Inquiry.
 Millat, K.M. (2014). Monitoring, Evaluation and Incentive Mechanisms in Support of Sustainable Banking Regulation Frameworks. Bangladesh Bank. Syed Ali-Mumtaz H.

CHINA*

GDP – US\$6807 per capita

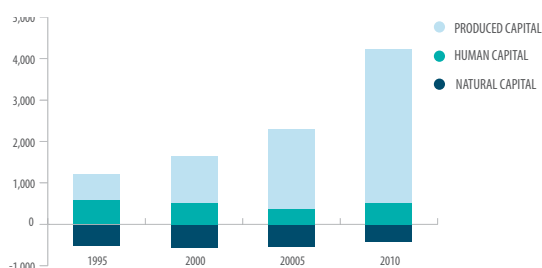
Savings rate 50%

Medium natural and human capital



REAL ECONOMY CAPITAL

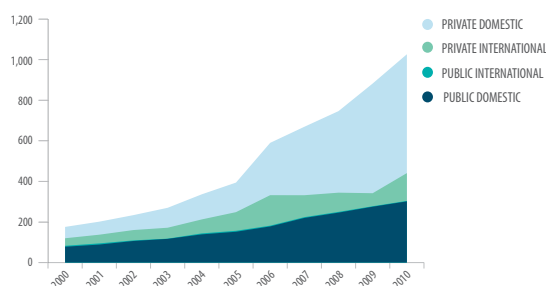
Change capital stock per capita, Current US\$



China's stock of produced capital has increased spectacularly over recent years, through rapid development of infrastructure and industry. However this has taken a toll on the environment, with estimates that the human cost of pollution could be as much as 13% of GDP.

FINANCING FOR DEVELOPMENT: SOURCES AND NEEDS

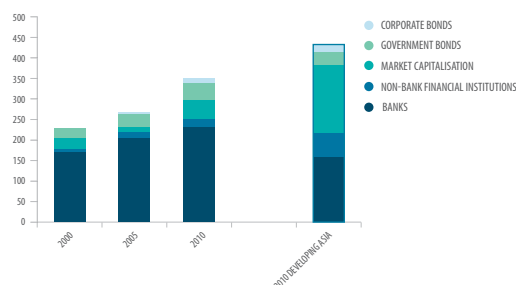
Resources for development per capita, 2005 US\$



It is estimated that an annual investment of at least 2 trillion yuan (US\$320 billion) is needed to achieve national environmental targets for energy efficiency, renewables, and environmental protection. Government will be able to contribute around 15%, leaving around US\$270 billion a year to be mobilised from private investment.

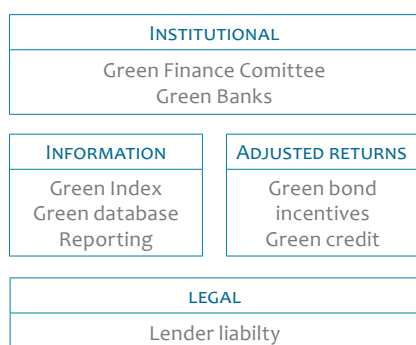
FINANCIAL SYSTEM

Financial assets, % of GDP



China's financial system is dominated by banking. National, regional, and local governments play a significant role directing the activities of banks and other financial intermediaries. There is a strong tendency of the formal sector to lend to large state-owned corporations and others with political connections, leaving smaller and less favoured businesses struggling to fund their growth. Reforms are ongoing to enable market forces to play a more effective role in capital allocation.

FINANCIAL SYSTEM INNOVATION



Green financial reforms are set to pay an integral part in the 13th Five-Year Plan (2016-20) for financial reform led by the People's Bank of China. They have developed set of 14 measures to establish a green finance system in China, such as creating green banks, issuing more green bonds, and opening new channels for IPOs by green businesses. One of the proposed measures is to create a green banking system composed of national-level eco-development banks, local specialist banks that offer loans to the environmental industry as well as to standard commercial banks for their own environmental activities. The creation of more green bonds, particularly, is also seen as an important way of raising funds for investment in green infrastructure.

FURTHER INFORMATION

Green Finance Task Force (2015). Establishing China's Green Financial System. People's Bank of China/ UNEP Inquiry.
Zhang et al. (2015). Greening China's Financial System. IISD/DRC



INDIA*

GDP - US\$1,499 per capita

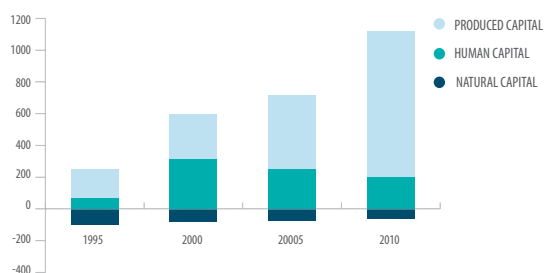
Savings rate 34%

Low natural capital, medium human capital



REAL ECONOMY CAPITAL

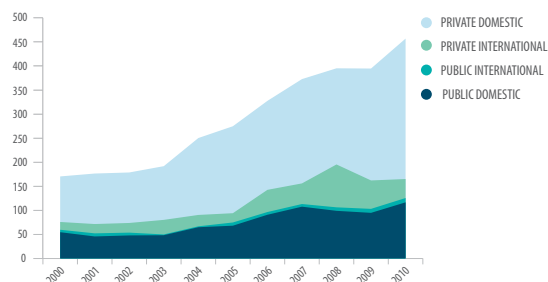
Change capital stock per capita, Current \$



A decade of rapid economic growth has brought many benefits but also serious air and water pollution. It is estimated that environmental degradation costs India \$80 billion per year or 6% of GDP. Large scale infrastructure development over the next decade will shape India's economy, environment and quality of life.

FINANCING FOR DEVELOPMENT: SOURCES AND NEEDS

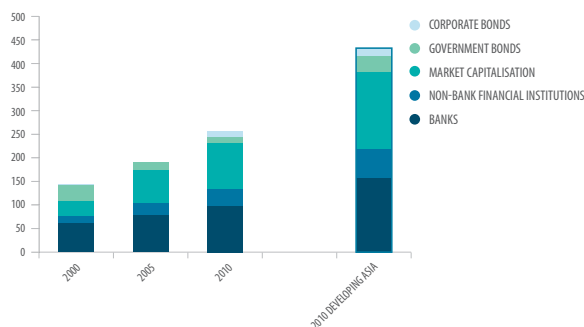
Resources for development per capita, 2005 \$



US\$ 1 trillion of infrastructure investment is needed over the next 5 years. Capital controls have been reduced substantially to give access to foreign capital. Domestic bank deposits have traditionally been an important source of finance for infrastructure in India, but are not ideal for financing long term projects.

FINANCIAL SYSTEM

Financial assets, % of GDP



The Indian financial system has been dominated by public sector firms, with public banks making three quarters of all loans. 58% of loans are policy directed (to priority sectors or to government). Significant progress has been made in building equity markets, however bond markets remain underdeveloped and overall regulations are outdated.

FINANCIAL SYSTEM INNOVATION

INSTITUTIONAL	
Indian Financial Code reforms	
INFORMATION	ADJUSTED RETURNS
Disclosure requirements	Green Bonds Yield Cos
LEGAL	
Indian Financial Code reforms	

A new Indian Financial Code is to be implement which includes far reaching reforms to address weaknesses in consumer protection, micro and macro prudential regulation, and aims to develop a more effective and efficient financial system.

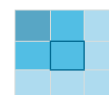
The UNEP Inquiry, working with the Federation of Indian Chambers of Commerce and Industry (FICCI) has highlighted opportunities to develop better market orientated green financing, such as through better information and risk management, and through development of instruments such as green bonds and yield cos for long-term green investment.

FURTHER INFORMATION

Inquiry/ Federation of Indian Chambers of Commerce and Industry (2014). Designing a Sustainable Financial System for India. Interim Report.

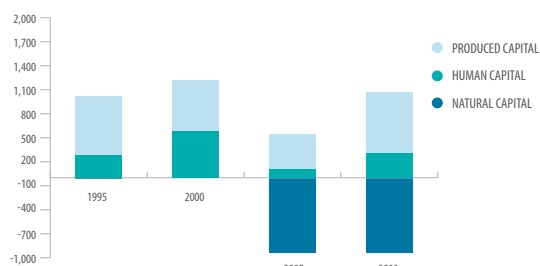
INDONESIA*

GDP - US\$3,485 per capita
Savings rate 34%
Medium human & natural capital



REAL ECONOMY CAPITAL

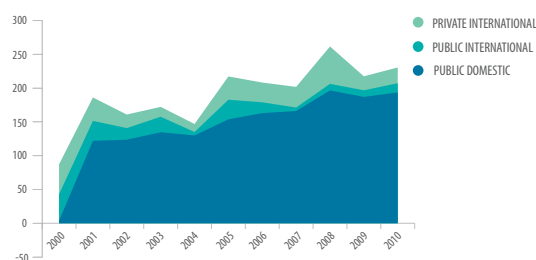
Change capital stock per capita, Current \$



25% of GDP is dependent on management of natural resources. Natural capital stocks amount to around \$7k per capita, but are being eroded by on average of nearly \$1k each year.

FINANCING FOR DEVELOPMENT: SOURCES AND NEEDS

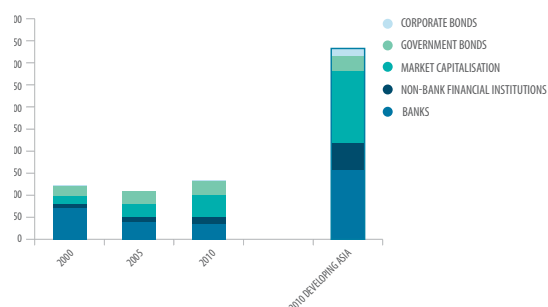
Resources for development per capita, 2005 \$



Gross annual savings amount to c \$700 current USD per person, largely from domestic public and private sources. Savings rates are lower than peers. Based on national plans, public and private investment need for sustainable development are in the order of US\$200 billion/ year (US\$830 per capita).

FINANCIAL SYSTEM

Financial assets, % of GDP



Overall the financial system intermediates around \$220 per capita to the private sector annually. Banking dominates, (providing US\$45 billion or around 78% of financing), although only 18% of Indonesian companies make use of formal credit lines and face high interest rates and high rate spread. Institutional investors manage a small volume of assets (10.5% of assets held by insurers, 2.6% by pension funds and 6.4% by finance companies).

FINANCIAL SYSTEM INNOVATION

INSTITUTIONAL OJK Sustainable Finance Roadmap	
INFORMATION Bank EIAs Reporting Capacity building	ADJUSTED RETURNS Incentives for green bonds
LEGAL Regulation principles of sust.finance	

In 2014 the Financial Services Authority (OJK) launched a Sustainable Finance Roadmap, to develop green finance infrastructure.

The roadmap is mainly focused on information improvement measures (such as mandatory reporting, enhanced EIAs by banks, and awards and indexes for sustainable finance). However it is also considering the use of fiscal incentives, for investments such as green bonds. The roadmap will be developed and implemented through a series of national and regional cross government, and public-private forums.

FURTHER INFORMATION

OJK (2014) Sustainable Finance Roadmap
UNEP Inquiry (2015) Indonesia: Towards a Sustainable Financial System

3.2 Emerging Policies, Regulations and Standards

Sustainable finance is more than a set of individual actions by leading financial institutions—work has now entered the next phase of designing the key parameters for the financial system as a whole. Sustainable finance in Asia-Pacific's, as well as elsewhere, has to date mainly concerned the actions of individual financial institutions, sometimes encouraged and supported by voluntary associations, principles and codes. Building on this experience is, however, an exciting next phase where the drivers of sustainable finance become embedded in the rules governing the financial system.

Information is the lifeblood of efficient financial and capital markets, and key to internalizing sustainable development into risk-pricing and lending and investment decisions. The broader development of the region's financial system involves improved information gathering, disclosure, analysis and use in lending and investing decisions.

In addition, there are growing moves to specifically enhance the disclosure of environmental, and in some instances social and governance, risks – for example Vietnam's *Sustainability Reporting Handbook for Vietnamese Companies* introduced in 2013 by the State Securities Commission. Leading stock markets across the region (such as Shanghai, Shenzhen and Hong Kong) are providing guidelines, or mandatory disclosure requirements (Singapore) for reporting on environmental and broader sustainability risks. In some cases (such as in Malaysia and Indonesia) sustainability-linked exchange traded funds have been developed. Some financial regulators are complementing their traditional oversight with green risk assessments, inspired in most instances by the Green Credit Guidelines of the China Banking Regulatory Commission. Also in China, efforts are being made to connect the large data sets managed by the Ministry of Environmental Protection and the People's Bank of China and the three other financial regulators in order to provide regulators, investors and banks with access to more systematic information about the environmental features of both project owners and financial institutions.

“We are focused on financial inclusion for agriculture, factories and SMEs [...] The Bangladesh Central Bank has made a revolutionary move in becoming developmental in outlook and strategy”

Atiur Rahman, Governor of the Central Bank of Bangladesh³⁹

There is a long history in the region of policy-directed lending and investing. Regional governments have in particular established ‘priority sector lending’ as a key policy tool to improve access to credit for underserved sectors, particularly SMEs and agriculture. India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam implement priority sector lending in the private sector through quotas and interest rate caps.

- In India, 40 percent of all bank loans must go to priority sectors, which include agriculture, SMEs and export-oriented industries.
- Indonesia and the Philippines both direct priority sector lending to SMEs, with quotas of 20 percent and 8 percent, respectively.
- Thailand directs 20 percent of bank deposits to agriculture (14 percent) and SMEs (6 percent).
- Malaysia and Vietnam mandate interest rate discounts for lending to priority sectors.

Development banks have played a crucial role in supporting long-term infrastructure investment, notably the Asian Development Bank. This form of *de facto* policy directed lending, has evolved to recently with

the establishment of the Asian Infrastructure Investment Bank (AIIB) and the Shanghai based BRICs Bank.

Priority lending can also be more implicit than a published requirement. In China, for example, priority lending has largely operated through state-owned and policy banks, and has been a complex and often opaque activity undertaken at local levels, using ‘shadow banking’ investment vehicles established especially for the purpose.

Greening the region’s bond markets has become a practical possibility, led by a growing issuance of ‘green bonds’. In 2013, Republic of Korea’s KEXIM Bank issued the first green bond in Asia to raise capital for environmentally friendly projects. The KEXIM green bond was oversubscribed by an estimated US\$1.3 billion on the original US\$500 million issuance, and was a great success among global institutional investors, with 21 percent going to Asian investors. Moreover, the Asian Development Bank (ADB) was the third leading development bank to have issued green bonds, totalling US\$897 million. More recently Taiwan’s Advanced Semiconductor Engineering issued Asia’s first corporate green bond – a US\$300 million BBB offering that was six times oversubscribed, while the Development Bank of Japan became the first Japanese issuer of a green bond with their EUR250 million green property bonds over three times subscribed.

Green bonds are now emerging at both the issuance and market infrastructure level across key markets in the region. China has decided that green bonds will be an important part of the reform of China’s financial markets, and it is likely that China will become the world’s largest green bond market in the next few years, driven by the government’s green agenda and by public concern for environmental issues. Recently, India set up of the India Green Bonds Market Development Committee, hosted by the Federation of Indian Chambers of Commerce. In Indonesia, the government is working hard to develop an Islamic finance system around the country, and Green Sukuk to fund renewables and other green infrastructure are likely to play a key part. A big question concerns when the giant bond markets of Japan will stir. A big question concerns when the giant bond markets of Japan will stir; the Development Bank of Japan recently issued a green bond in the European market. The Development Bank of Japan recently issued a green bond in the European market — prove to be the first swallow of summer.

3.3 Systematic Approaches

A key element for success will be the development of a more systematic approach—one that embeds sustainable finance at the heart of the process of financial market development. Even the recent structural interventions that impact the rules governing the entire financial system, not just the actions of individual actors, remain largely one-off, ad hoc measures. Recently, however, the first generation of measures for establishing a systematic approach has emerged.

- Indonesia’s new Financial Service Authority Otoritas Jasa Keuangan (OJK) established a Roadmap for Sustainable Finance in 2015. OJK is tasked with preparing a Master Plan for Indonesia’s Financial Service Sector for the period of 2015–2024, which includes a requirement for priority allocation to key sectors, enhanced reporting requirements and environmentally-responsive capital weighting for banks, steps to increase

“The sustainable finance program is not only intended to increase financing but also to improve resilience and competitiveness of financial institutions..... sustainable finance is a new challenge as well as an opportunity in which financial institutions may gain benefits of growing and developing more stably.”

Muliaman D. Hadad, Chairman of Indonesia Financial Services Authority (OJK) Board of Commissioners⁴⁰

understanding, knowledge and competences in the financial services industry, and the provision of incentives and coordination with related agencies.

- ④ The People's Bank of China, building on the early work of other agencies and financial institutions, established in mid-2015 the Green Finance Task Force, co-convened and supported through the UNEP Inquiry. The Task Force includes public and private organizations concerned with responsibilities and interests in the development of China's financial system. The initial work has resulted in a suite of 14 proposals for greening China's financial system, which are now being taken forward with the support and pressure from a newly established Green Finance Committee, again under the People's Bank of China.
- ④ In Japan, starting in 2010, the government has drawn together a committee of financial sector companies to develop a set of voluntary Principles for Financial Action for the 21st Century. The principles aim "to steer society toward sustainability by changing the flow of money to those activities which correspond to such sustainability goals." There were 192 signatory financial institutions as of the end of October 2014. Ongoing working groups are structured by sector to serve as a forum for financial companies to exchange information implementation of the principles and to develop sector specific guidelines.⁴²

“The People's Bank of China is spearheading the drafting of the 13th Five Year Plan for the reform and development of China's financial sector; green finance will be a key element of this plan”⁴¹

Pan Gongsheng, Deputy Governor of the People's Bank of China

4

ACTIONS TO ADVANCE ASIA-PACIFIC'S SUSTAINABLE FINANCIAL SYSTEMS

Countries in the Asia-Pacific region are among the most active innovators in advancing sustainable financial systems. As the preceding section demonstrates, countries in the region are among the leading innovators in advancing policy-directed measures to better align financial systems with sustainable development. In particular, a number of specific countries, including Bangladesh, China and Indonesia, but also India, Thailand and elsewhere, have developed approaches built firmly on their own context and perspectives, while drawing on relevant international experience.

4.1 Options for Action

The region is arguably the world's most diverse in terms of country size, stage of development and underlying context. Such diversity provides for a richness of experience and the potential for intra-regional learning. However, it also calls for caution in reaching region-wide conclusions, let alone recommendations for action.

That said, it is possible to highlight a portfolio of developments and potential innovations worthy of consideration by all countries in the region. Drawing from both broader international experience and the experiences of countries in the region that have been captured through the UNEP Inquiry research, the following areas merit consideration:

1. **Sustainable banking:** Given the dominance of banking across the region's financial systems, and the need for stronger enforcement of environmental regulations in many countries, there would be considerable benefit from establishing 'green credit' risk management and reporting requirements to counter-balance the mispricing of environmental risks, and drawing in the banks to address broader environmental policy objectives. Consideration might also be given to strengthening the underlying incentives for green credit by offering green fiscal incentives and through variations in capital weightings.
2. **Policy-directed lending and investing:** Green credit approaches are essentially market-based, arms-length approaches to policy-directed lending, and there is scope for high-level intervention for state-owned banks and investment vehicles such as sovereign wealth funds. Most obvious is the hope that existing and newly established vehicles, such as the Asian Infrastructure and Investment Bank, adopt best practices from the international level, at a minimum embracing the Equator Principles or their equivalent. They must also include suitable grievance mechanisms through which the actual or potential impact of lending and investing practices can be challenged. Beyond such compliance approaches, however, are more values-

based approaches to sustainable finance, such as the growth of Islamic banking which provides an expanding opportunity.

3. **Green bonds:** Bond market growth will be a particular feature of the next stage of development of the region's financial systems. The region has the opportunity to lead in green bond issuance and benefit from their associated use of proceeds for green infrastructure and enterprise development, notably for the development of urban, transport and energy infrastructure, through local municipality, corporate and sovereign issuance. Moving beyond exotic, ad hoc issuance to attract dual-interest investors, however, requires the development of standards (what is 'green') and the establishment of associated ratings to enable 'green-as-risk-factor' to be more effectively internalized into pricing. In addition, there should be penalties for non-compliance with the 'green' use of proceeds and fiscal measures.
4. **Stock exchanges:** Publicly-traded equities are a growing source of enterprise finance across the region, and like bonds provide an important means for channeling savings aggregated through domestic and international institutional investors. There is clear potential for requiring listed companies to provide investors with material information about their social and environmental performance, building on the international experience of the Sustainable Stock Exchange initiative (of which the Stock Exchange of Thailand is a member), and the robust approach being developed by the Singapore stock exchange involving mandatory reporting and associated penalties for non-compliance. Such reporting allows for the development of indexes, benchmarks and associated tracker funds, such as those developed by the Indonesian stock exchange.
5. **Lender and investor liability:** Environmental compliance can be strengthened where regulatory enforcement is weak by establishing lender and investor environmental liability, building in legal 'safe harbors' where financial institutions can demonstrate robust environmental due diligence and oversight. Early stage liability might be reputational rather than legal, just as Singapore might publicly highlight banks and investors that are financing companies non-compliant in their Indonesian operations with Singapore's Trans-Border Haze legislation. An alternative where judicial capacity remains limited is to establish a flat-fee fine, an approach currently being considered in China.
6. **Monetary policy:** Low and stable interest rates and inflation clearly incentivize longer-term investment in productive infrastructure and enterprises. Non-traditional approaches to monetary policy, however, can more directly influence green and inclusive lending and investing. The Bangladesh Central Bank, for example, has arguably demonstrated that non-traditional central bank activities, such as low-cost refinancing of green and rural lending, can improve the effectiveness in addressing traditional monetary policy goals, as well as providing green development support. More broadly is the question of whether the growing balance sheets of many central banks, now globally at US\$24 trillion, can be deployed in pursuit of green lending and investing, for example by greening asset purchasing programs.
7. **Prudential oversight:** Financial stability is both an objective in itself and a means through which potential sources of future financial sector instability can be addressed. So it is with environmental considerations, and associated policy and technology drivers. If left unmitigated, they can create financial instability. Policies to address air pollution, for example, might lead to increased loan delinquency rates for banks that lend to pollution-intensive industries, and similarly for measures that address climate change that might impact the credit worthiness of carbon-intensive businesses, such as across the coal value chain. Ensuring that key financial

institutions undertake effective environmental stress testing is part of the solution, currently being used on a trial basis in China for banks and in the UK for insurance companies, as is raising this practice to a prudential and macro-prudential level where appropriate.

8. **Cross-border investment:** The region accounts for one third of global cross-border investment (FDI) flows, and this share is growing rapidly. Enhanced sustainability oversight from originating and host country regulators, such as China's 'Green Credit Guidelines' that cover such flows in principle when emanating from domestically licensed banks, together with dedicated investment authorities, would make a considerable difference.

Improved dialogue and coordination, as well as an explicit ambition and a defined pathway, are critical enablers for advancing a sustainable financial system. Key actors need to work together in aligning the financial system to sustainable development. Establishing pathways and coordination mechanisms for ambitious collective action is illustrated by Indonesia's 'Roadmap for Sustainable Finance', China's recently established Green Finance Committee, overseen by the People's Bank of China, and by South Africa's 'Financial Charter' process engaging all major actors working on how best the financial community could contribute to realizing the country's post-Apartheid ambitions.

4.2 Need for International Cooperation

International cooperation and coordinated action is key for advancing national and regional action in establishing sustainable financial systems. International financial governance remains fragmented, although the response to the global financial crisis demonstrated the will and capacity—under the right circumstances—of the international community to act collectively and ambitiously. Shaping a sustainable financial system presents another opportunity for strong collective international action—action that could yield essential long-term sustainability benefits. There are a number of ways in which international cooperation can advance this agenda:

- **International financial governance:** There are a number of highly relevant international institutions responsible for macro-economic guidance and financial market development, including standard setting, as well as key policy platforms (such as the G20) that could be critical in setting the direction, pace and overall ambition for achieving sustainable finance.
- **Formal UN processes:** The UN's Financing for Sustainable Development process offers one possible means for enhanced international cooperation in progressing this agenda. The 'zero draft' of the outcome document of the third International Conference on Financing for Development to be held in Addis Ababa in July 2015 notes that innovative financial and capital market policies and regulations and standards that can align private capital flows to the financing needs of sustainable development will be crucial to mobilizing resources.⁴³ Financial system reforms and innovations can support the means of implementation in advancing sustainable development goals, including the effective management of the climate and its impacts.
- **Plurilateral action:** Informal or semi-formal networks provide an important avenue for developing international cooperation, not only through learning but also through the development of prototypical standards, often at an experimental, principles-based level. The UNEP Inquiry is itself an example of such a network approach, as is the Sustainable Banking Network, a grouping of central banks and banks set up to share experience in advancing green banking, inspired by the work of the China Banking Regulatory Commission and managed by the International Finance Corporation.

These approaches are not exclusive, nor will any one work by itself, since one leads to and can catalyze the others. For example, exploratory work on environmental stress testing of bank balance sheets, definitely through voluntary, plurilateral action, could lead to the Bank of International Settlements considering comparable measures in relation to its own standard-setting. Similarly, the consideration by the G20 of financial market reform through a sustainability lens could lead to both useful contributions to formal UN processes, and to actions taken at national levels and through learning networks.

4.3 Concluding Remarks

Advancing sustainable financial systems can enhance the efficiency, effectiveness and resilience of the region's financial and capital markets. Placing sustainable development at the heart of financial and capital markets does not represent an 'additional' performance measure. Quite the contrary, it improves the availability of material information, enhances the all-important task of risk-pricing and the efficiency of credit and capital allocation. For example:

- *Financial exclusion* weakens both the underlying vitality of the economy on which the financial system depends, and negatively impacts the financial system by allowing profitable lending and investment opportunities to remain unfinanced.
- *Under-priced environmental risks* ultimately impact the value of specific financial assets, and damage the capacity of the financial system to perform its functions of effective price discovery and intermediation.
- A growing mismatch between risk management and underlying risks, furthermore, eventually destabilizes the financial system as a whole through failing confidence and demonstrable systemic weaknesses.

Moreover, by increasing the flow of finance into the enablers of a healthy and dynamic, inclusive, sustainable economy, it secures higher, long-term, risk adjusted returns, and improves the resilience of the financial system itself.

That is, aligning the region's financial systems with sustainable development is the very basis on which they can be made fit-for-purpose in the 21st century.

Endnotes

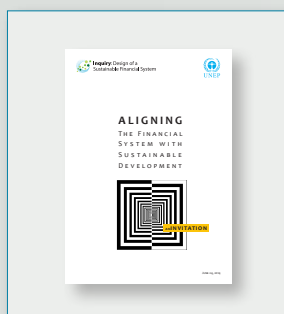
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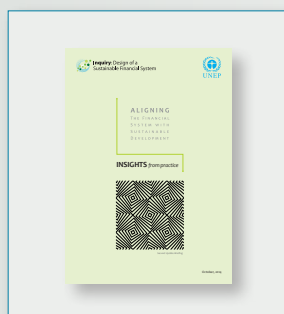
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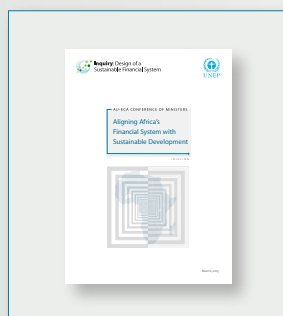


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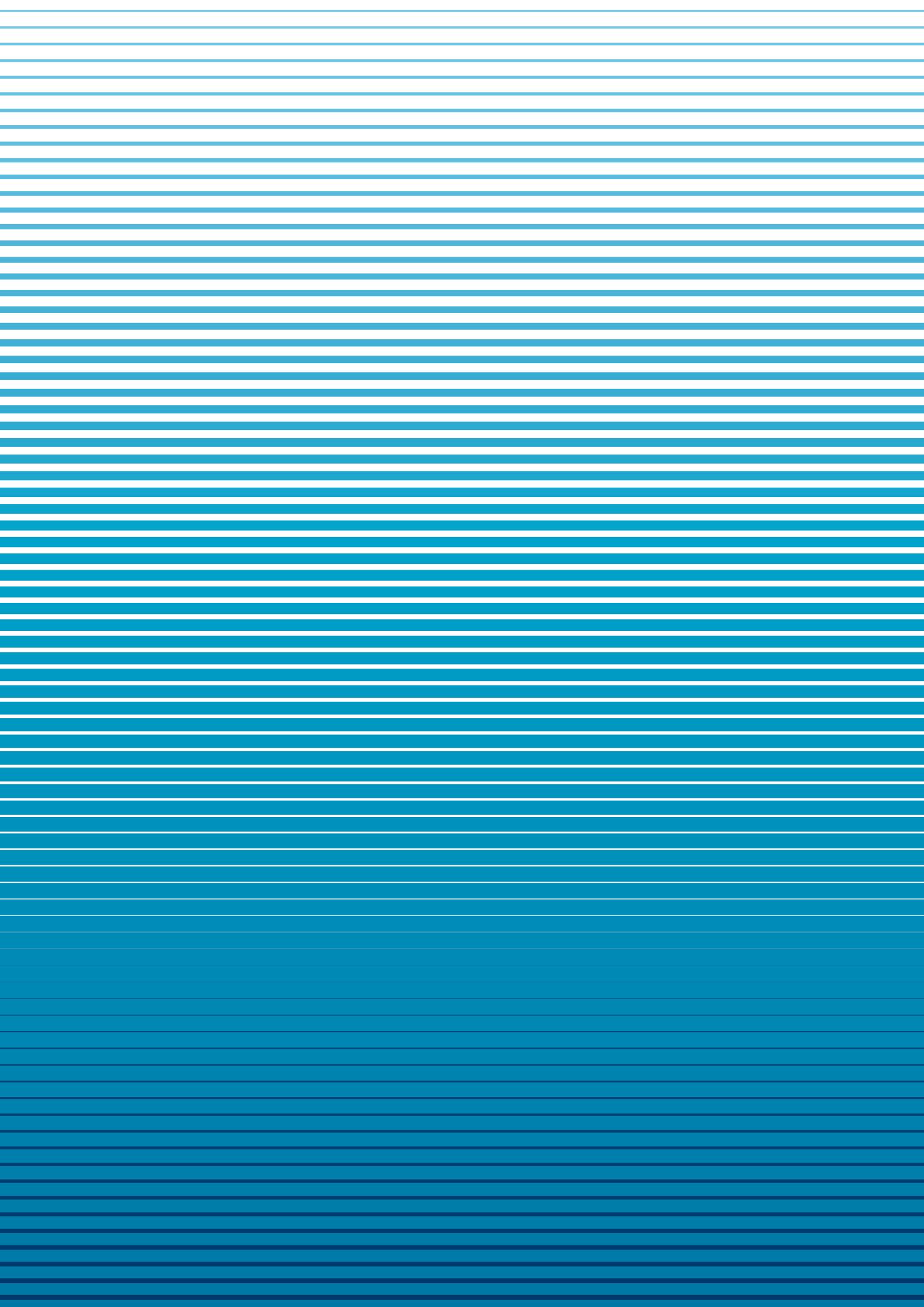
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