

Domestic and International Finance

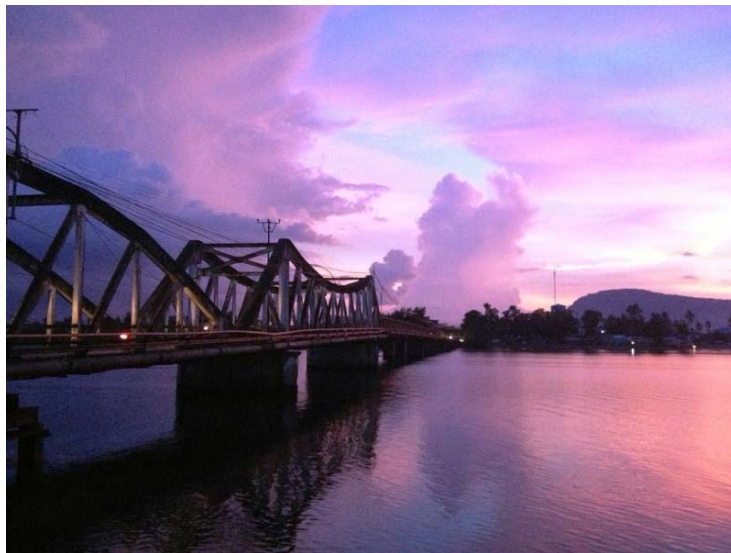
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Breakout Session 1: Business, Finance and Industry
Low Carbon Asia Research Network (LoCARNet)
11 -13 October 2015
Johor Bahru, Malaysia

Finance needs for Sustainable Development

Investment gap for the world under a business-as-usual scenario is far larger (\$5 trillion/y) than the incremental investments needed to accommodate climate change (\$0.7 trillion/y, 14%).

Climate change considerations must be mainstreamed into such investments!



Source: JICA

Sector	Business-as-usual scenario investment needs		2°C scenario investment needs		Incremental investment required		Sources
	Cumulative 2010-2030	Annual average	Cumulative 2010-2030	Annual average	Cumulative 2010-2030	Annual average	
Power generation	6,933	347	10,136	507	3,203	160	IEA
Power transmission and development	5,450	272	5,021	251	-429	-21	IEA
Energy total	12,383	619	15,157	758	2,774	139	
Buildings	7,162	358	13,076	654	5,914	296	IEA
Industry	5,100	255	5,800	290	700	35	IEA
Building & Industrial total	12,262	613	18,876	944	6,614	331	
Road	8,000	400	8,000?	400?	-	-	OECD
Rail	5,000	250	5,000?	250?	-	-	OECD
Airports	2,300	115	2,300?	115?	-	-	OECD
Ports	800	40	800?	40?	-	-	OECD
Transport vehicles	16,908	845	20,640	1,032	3,732	187	IEA
Transport total	33,008	1,650	36,740	1,837	3,732	187	
Water	26,400	1,320	26,400?	1,320?	-	-	OECD
Agriculture	2,500	125	2,500?	125?	-	-	FAO
Telecommunications	12,000	600	12,000?	600?	-	-	OECD
Forestry	1,280	64	2,080	104	800	40	UNEP
Other sectors	unknown	unknown	unknown	unknown	unknown	unknown	
Total investment	99,833	4,991	113,753	5,689	13,934	698	
	-\$100tr	-\$5tr	-\$114tr	-\$5.7tr	-\$14tr	-\$0.7tr	

Sources: OECD³³, IEA³⁴, FAO³⁵, UNEP³⁶. Data presented in US\$ 2010 rates.

Note: Total investment does not include synergy effects that can occur between other investments besides energy, buildings and industry and transport. The total amount provided is a proxy of future investment. Investment in water and telecommunications infrastructure covers the OECD and emerging markets only. Investment in agriculture covers 93 developing countries only. See Appendix 1 for full details of assumptions, scope and calculations.

Source: WEF (2013)

Asia's Total Infrastructure Investment Needs by Sector, 2010–2020 (in 2008 US\$ million)

Sector/Subsector	New Capacity	Replacement	Total
Energy (Electricity)	3,176,437	912,202	4,088,639
Telecommunications	325,353	730,304	1,055,657
Mobile phones	181,763	509,151	690,914
Landlines	143,590	221,153	364,743
Transport	1,761,666	704,457	2,466,123
Airports	6,533	4,728	11,260
Ports	50,275	25,416	75,691
Railways	2,692	35,947	38,639
Roads	1,702,166	638,366	2,340,532
Water and Sanitation	155,493	225,797	381,290
Sanitation	107,925	119,573	227,498
Water	47,568	106,224	153,792
Total	5,418,949	2,572,760	7,991,709

\$ = United States dollar.

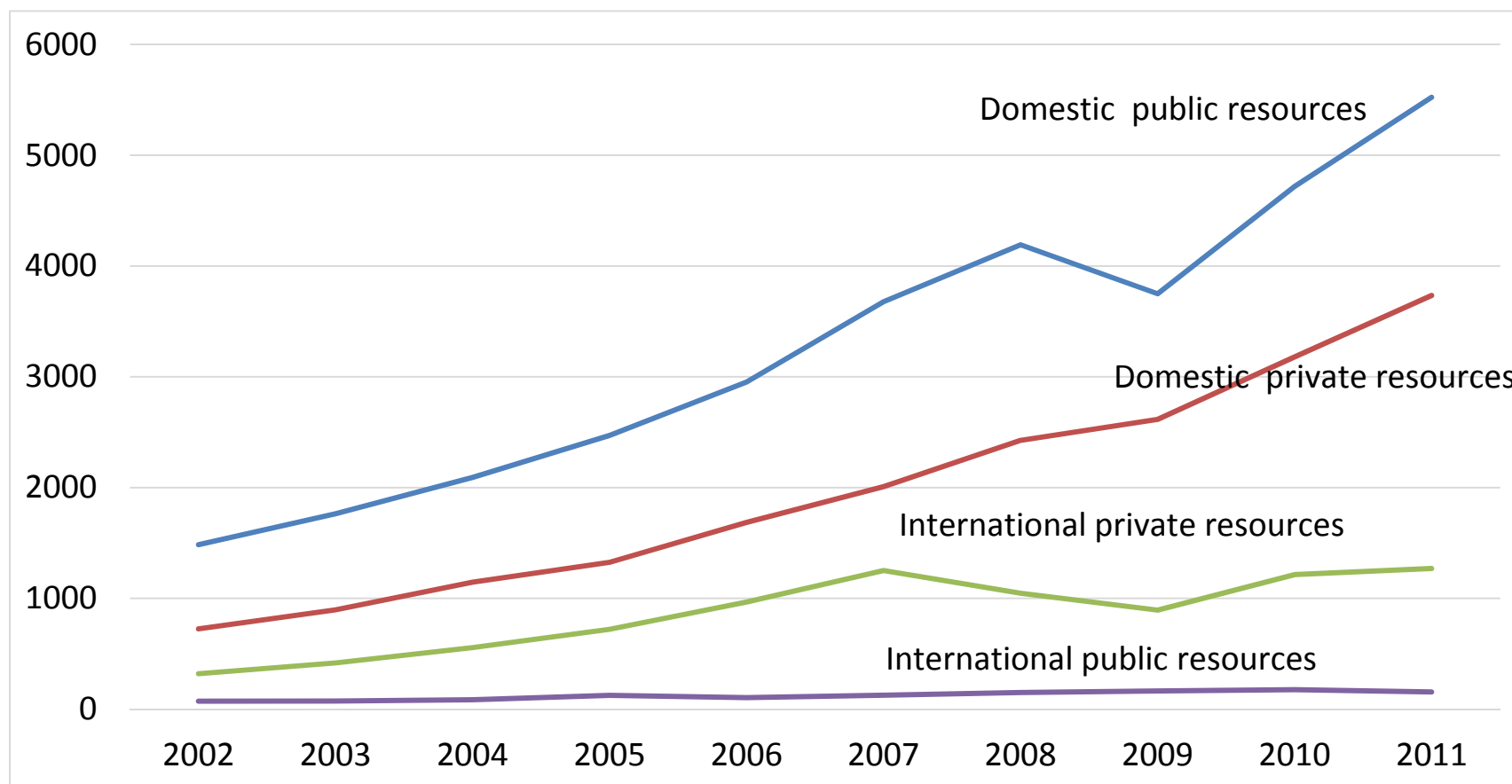
Sources: ADBI (2009); Bhattacharyay (2008).

Source: ADB and ADBI (2009)

Financial resources for sustainable development

Trends in finance to developing countries

(\$ billion, 2011 prices), 2002–2011

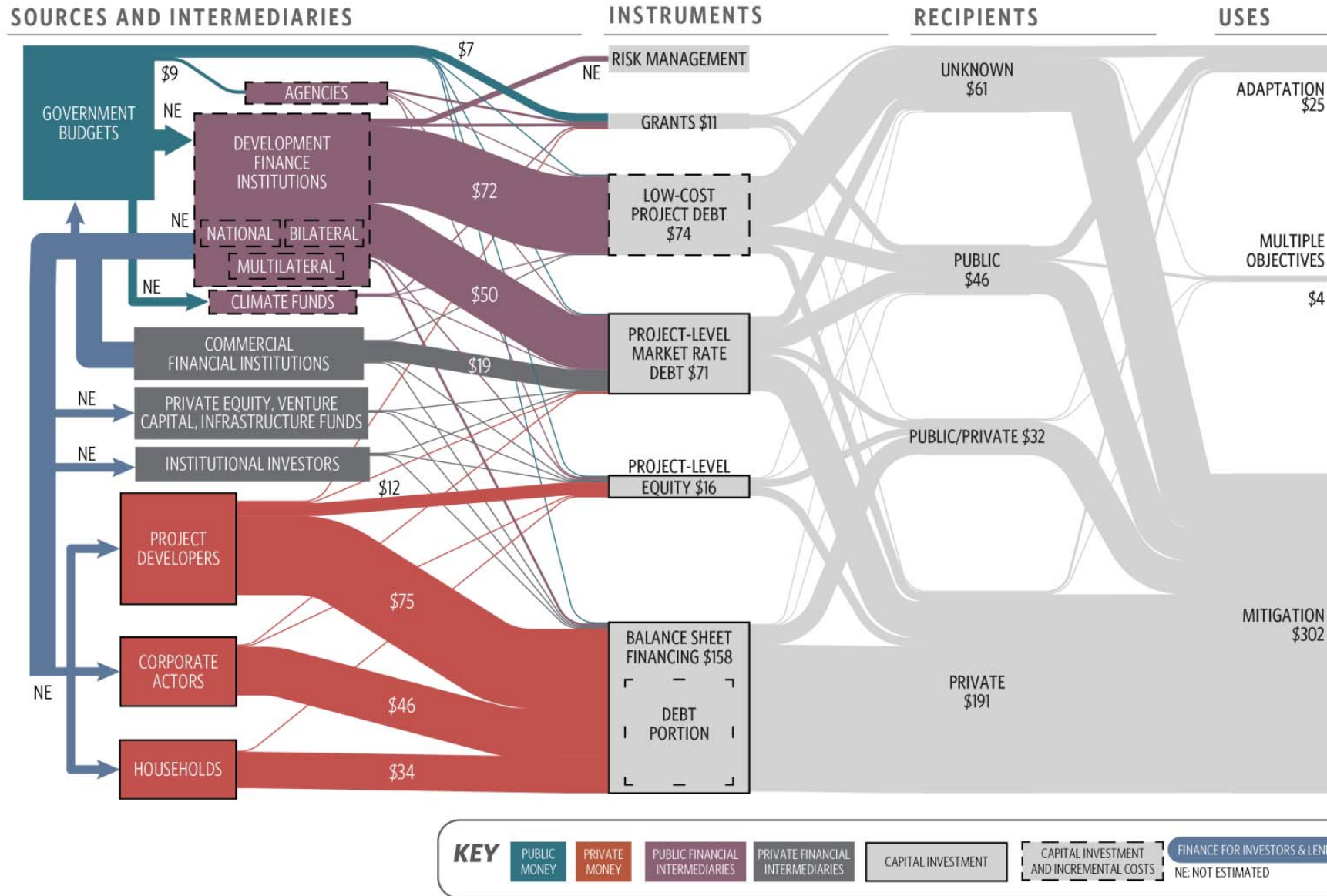


Sources: IMF, OECD, WDI, etc.

LANDSCAPE OF CLIMATE FINANCE 2014 USD 331 BN TOTAL

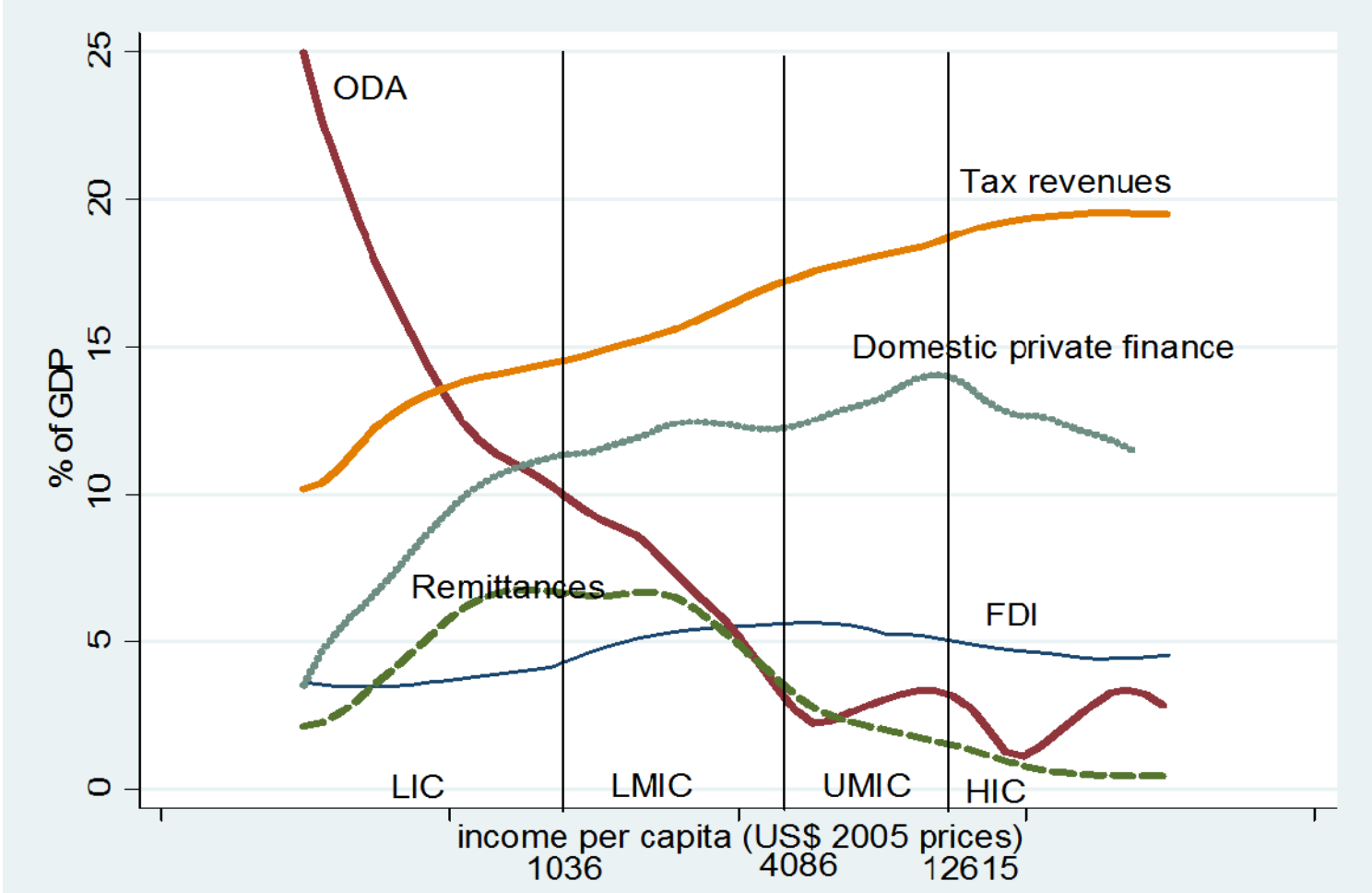


Landscape of Climate Finance 2014 illustrates climate finance flows along their life cycle for the latest year available, mostly 2013



Source: CPI (2014)

The composition of finance varies by level of income (% GDP)



Sources: IMF, OECD, WDI, etc.

Knowledge gaps

- Source of finance
 - Domestic vs International
 - Public vs Private
 - Blending and innovative finance
- Characteristics of each finance source
 - Volume, predictability, opportunity and risks
- Enabling environment
 - Policy, regulations and incentives
 - Role of players

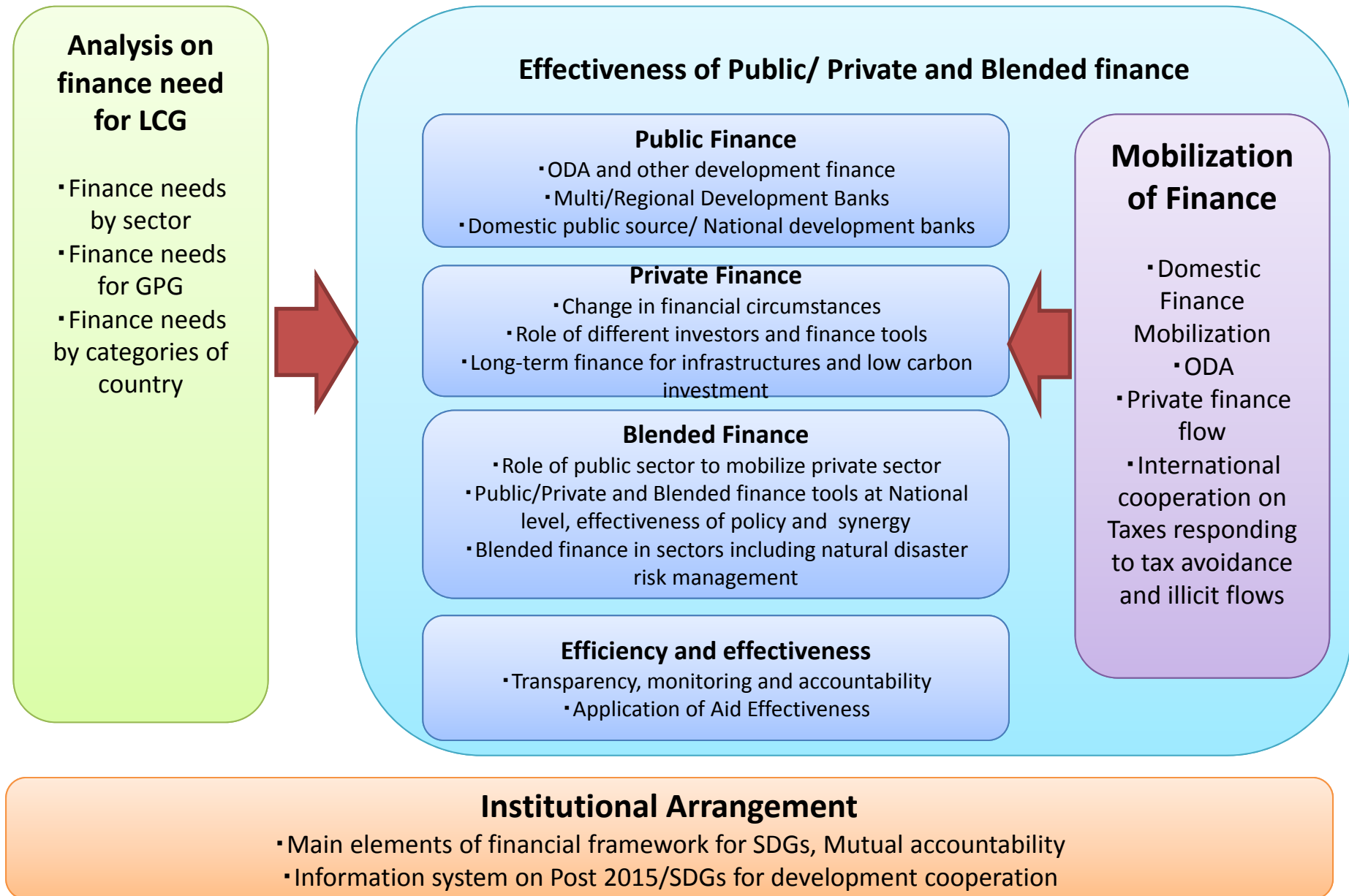
Characteristics, potentials and risks of finance

	Characteristics	Potential	Risk
Domestic public finance <ul style="list-style-type: none"> • Nat'l budget(Nat'l tax) • Municipality budget • Bonds • Domestic DFIs 	<ul style="list-style-type: none"> • Most stable and low risk finance source. • Good for finance in low profit public projects • Contribute to leveraging domestic private finance 	<ul style="list-style-type: none"> • Improved governance and financial system lead to increase of domestic finance flows and FDI. 	<ul style="list-style-type: none"> • Political difficulty in increase of tax revenue • Lack of capacity of appropriate public fiscal management • Risk to crowd-out private finance
International Public Finance <ul style="list-style-type: none"> • ODA • OOF • Multilaterals 	<ul style="list-style-type: none"> • Stable and low risk finance but low predictability • Limited volume of finance • Need to use efficiently and effectively 	<ul style="list-style-type: none"> • Leveraging private finance 	<ul style="list-style-type: none"> • Risk to crowd-out private finance. • Need to appropriate foreign reserve and forex management
Private finance	<ul style="list-style-type: none"> • Largest finance source. • Contribute to SD by investing in the project where social benefit will be increased while private benefit will be maximized. • Generate employment opportunity and sustainable development impact by expansion of business.◦ 	<ul style="list-style-type: none"> • Increase of private finance flow into developing countries • Increase of finance flows between developing countries 	<ul style="list-style-type: none"> • Unstable due to economic situation and sensitive to risks • Hard to capture the total flow of private finance • Hard to make sure the transparency and accountability due to business confidentiality
Blended finance <ul style="list-style-type: none"> • PPP • EU Blending mechanism 	<ul style="list-style-type: none"> • Sharing risks and cost by public, private finance will be mobilized and contribute to establish better business environment and market. 	<ul style="list-style-type: none"> • Increase of private sector participation 	<ul style="list-style-type: none"> • Risk of market distortion • Risk of dependency to public

key policy issues involved at national and regional level

- National Level
 - How to mobilize finance for Low-carbon Green Growth?
 - Domestic resource mobilization
 - International Public Finance and GCF
 - Private Sector Finance and Innovative Finance
 - Regional Level
 - Can Asian countries manage financial resources within the region?
 - Advanced economy
 - Emerging economy
 - Developing economy
- Incentive and regulation, Market, Enabling environment, Institutions

Proposed scope of the research - LCG Finance Analysis



Thank you for your attention!

Your comments are highly appreciated!

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