SHIPPING DEVELOPMENT FUND

JULY 2024

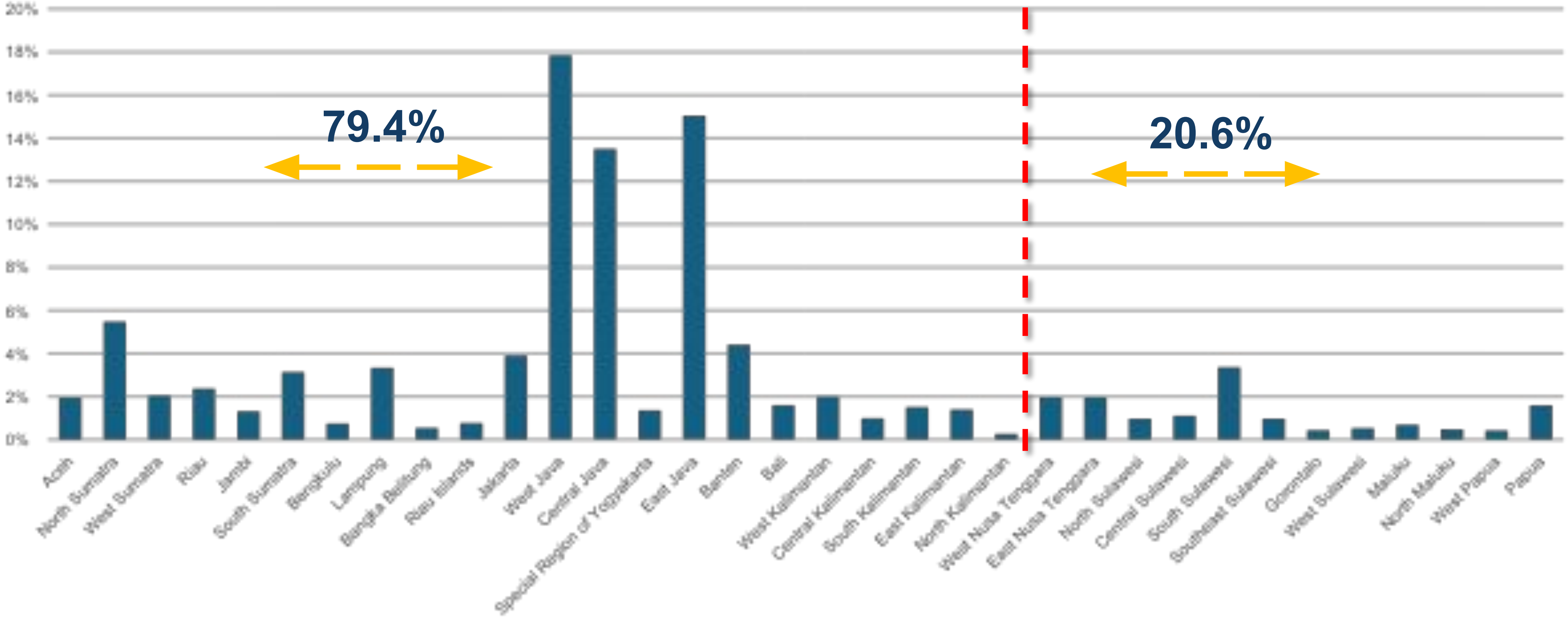
WORLD BANK GROUP

Indonesia's connectivity conundrum

- **Vast majority (80%) of the population lives West of the Wallace Line (Strait of Lombok, Strait of Makassar).**
- **Outside of Java, local economies rely heavily on primary sectors such as agriculture, fisheries and animal husbandry. There are insufficient factor conditions for value adding.**
- Ports in Western Indonesia are characterized by severe draft limitations (rivers, long shallow shorefaces) but generate volumes.
- Ports in Eastern Indonesia are located in natural bays with deep draft but lack cargo volumes.
- Only 20 ports have adequate volumes today or within 10 years to efficiently handle containers.

Indonesia's connectivity conundrum

Population division between Eastern and Western Indonesia



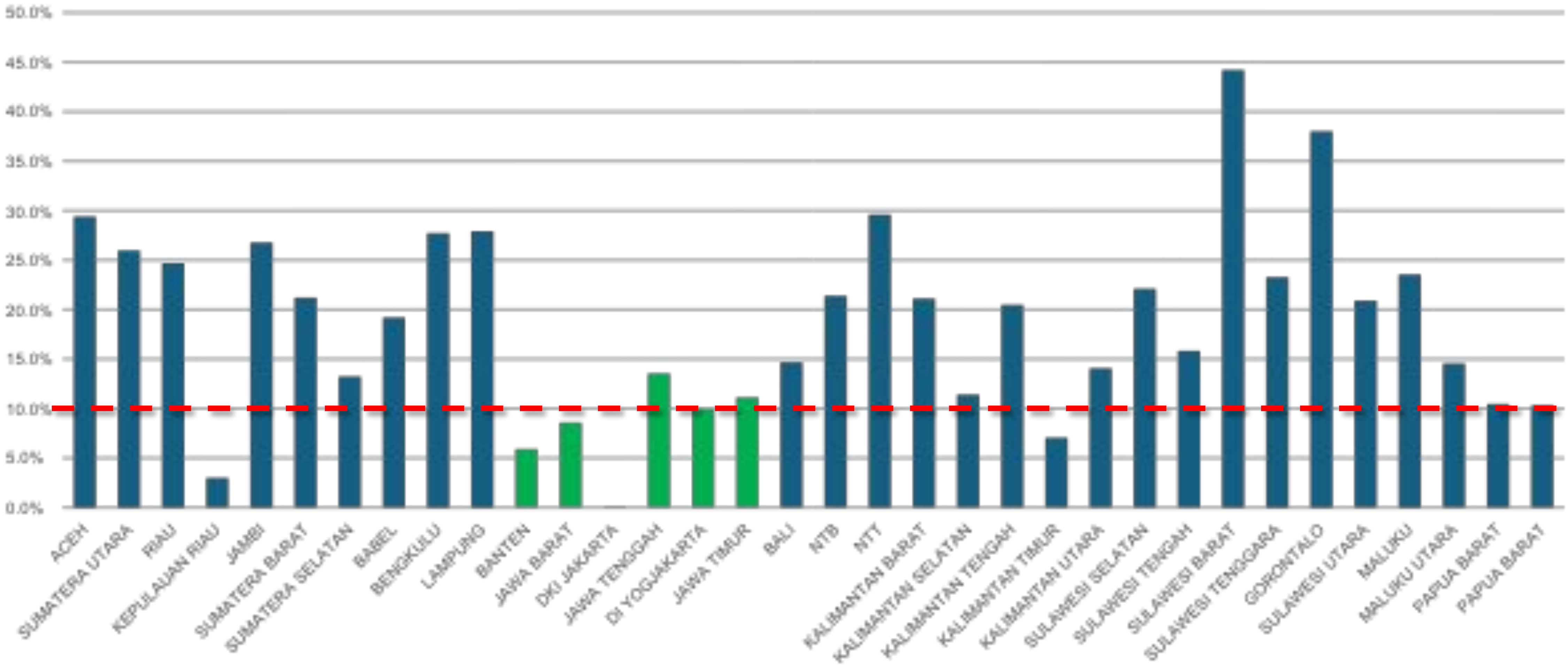
Source: BPS

SHIPPING DEVELOPMENT FUND

WORLD BANK GROUP

Indonesia's connectivity conundrum

% Contribution of Agriculture and Fisheries to GPDR



Source: BPS

Indonesia's connectivity conundrum

- Vast majority (80%) of the population lives West of the Wallace Line (Strait of Lombok, Strait of Makassar).
- Outside of Java, local economies rely heavily on primary sectors such as agriculture, fisheries and animal husbandry. There are insufficient factor conditions for value adding.
- Ports in Western Indonesia are characterized by severe draft limitations (rivers, long shallow shorefaces) but generate volumes.
- Ports in Eastern Indonesia are located in natural bays with deep draft but lack cargo volumes.
- Only 20 ports have adequate volumes today or within 10 years to efficiently handle containers.

Performance Profile Container Terminal

2 Quay Cranes

- MHC or STS
- Gearless means 10-15% more cargo capacity
- 1 crane is no crane (single point of failure)

RTG CY

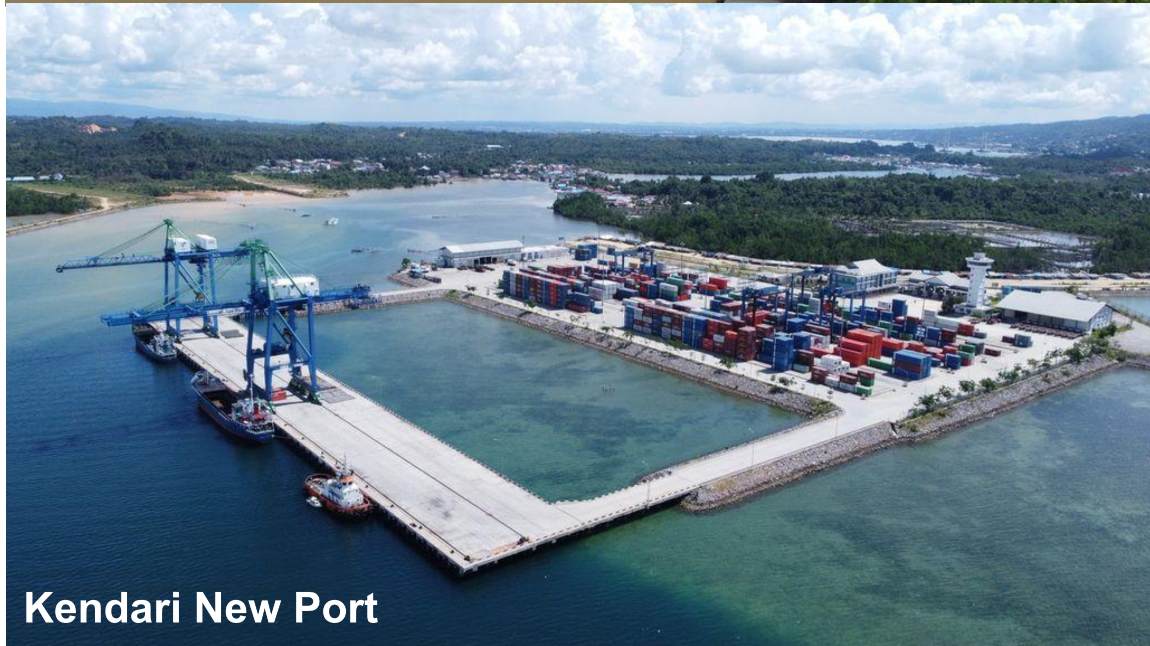
Adequate number of gates

MINIMUM CAPACITY OF

200.000 – 250.000 TEU

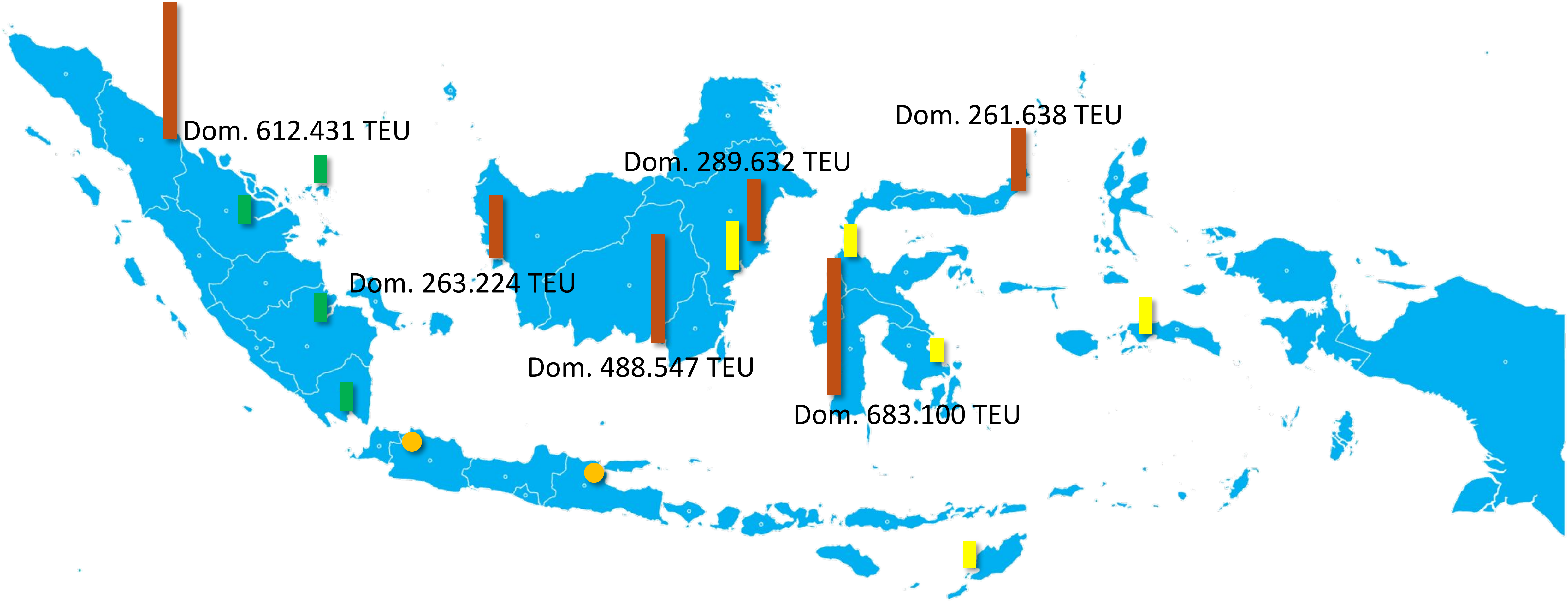
% Utilization → profitability

Samarinda (Palaran)



Kendari New Port

Future Domestic Container Ports of 200.000+ TEU



Surpasses the 100.000 TEU through the aggregation of international and domestic containers.

Surpasses the 100.000 TEU only through domestic containers.

Intermediate Outcome

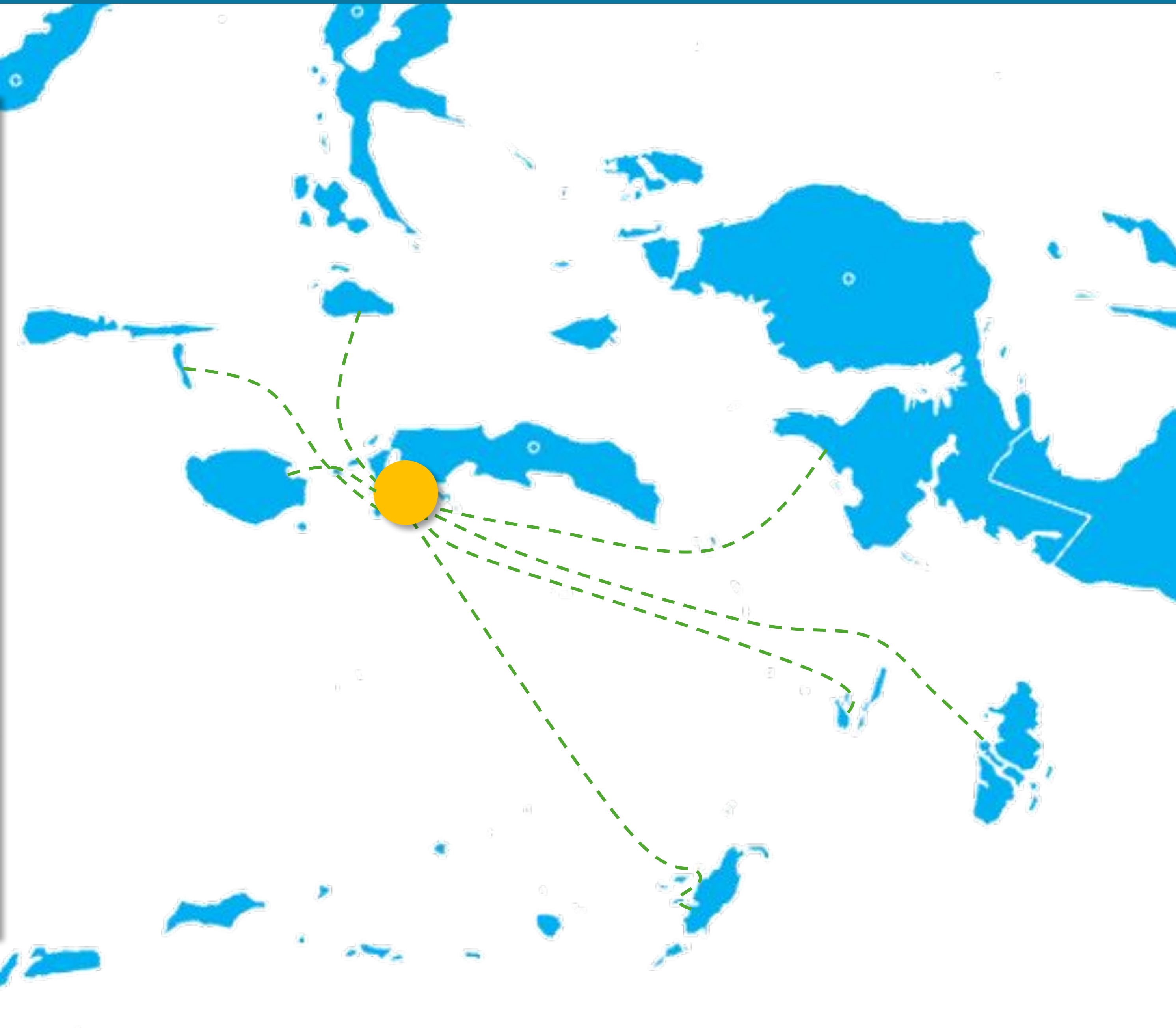
- Need for small container ships to effectively distribute in the domestic market.
  - 500 TEU shallow draft for river ports (Banjarmasin, Samarinda, Palembang, …)
  - 1.000 – 1.500 TEU shallow draft for tier two ports (Ambon, Kupang, Pantoloan, …)
  - 2.500 – 3.500) TEU shallow draft for tier one ports (Belawan, Makassar, Balikpapan, …)
- Cargo forecasts remain positive due to young and growing population.
- Especially for the small size (500 TEU) there will be a high demand. Combination of high volumes with small exchange size.
  - I.e. Banjarmasin, weekly throughput close to 10.000 TEU, average exchange is 250 TEU so 40 calls per week.

Intra-regional connectivity

Intra-regional connectivity

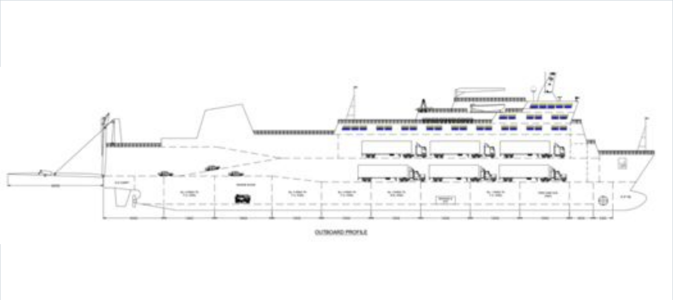
Potential for development of a RoRo networks:

- Fast (within 24-48 hours at consolidation port).
- Parcel sizes (small to large trucks, cars).
- Ability to carry perishable goods (agriculture/fisheries).
- Possibility to combine with passengers (RoPax).
- Different size of ships can be constructed to match ship size with demand.
- Relatively low costs of port development, no deep draft required.
- Relatively simple port operational concept.
- Cost effective up to 500 nautical miles when accurately account for all cost (cost recovery).



Intermediate Outcome

- Need for RoPax ships of various sizes to reliably connect underserved regions to a consolidation port.

Bahtera Nusantara Class	Legundi Class	Maluku Class (*design*)
		
GT 1.500	GT 5.500	GT 27.000
550 DwT	1.150 DwT	15.000 DwT
LoA 72m	LoA 100m	LoA 150m

- Required number of ships will depend on transformation of the network, but major numbers are expected.
- Mass-customization approach with ability to move ships to other routes or increase ship sizes (cascading).

State Owned Operators

asdp Indonesia Ferry

Average age: 24
Average GT: 1.021
Fleet above 25 years: 41%
Fleet above 20 years: 50%

PT JEMBATAN NUSANTARA WE LOVE INDONESIA

Average age: 46
Average GT: 1.749
Fleet above 25 years: 100%
Fleet above 20 years: 100%

Control both over port and ships and have as SOE a more dominant position in moving cargoes and competing with private sector compared to i.e. containers.

State Owned Operators

PELNI

We Connect, We Unify

24 ships
Average age 30.5
Above 25 years: 98%

Serves 57 ports
Long voyages with high call frequency

Upper and middle class have shifted to aviation modality (Low-Cost Carriers)
Ships are expensive to retro-fit for cargo (3-in-1), go for RoPax strategy?
Ships have little to no residual value

State monopoly but requires high levels of subsidy. Little to no private sector interest.

Containers

	MERATUS		PT TEMAS SHIPPING		SPIL		TANTO	
TEU fleet composition (large to small)	No ships	Average Age	No ships	Average Age	No ships	Average Age	No ships	Average Age
0% – 25%	5	27	3	27	5	28	7	27
26% - 50%	7	23	9	15	8	18	13	22
51% - 75%	10	13	12	13	12	13	17	13
76% - 100%	15	15	23	16	19	23	27	32

The challenge facing the domestic container shipping lines is that their large ships are all beyond the economic life and the market for second hand tonnage and new built has moved upward drastically since Covid 19 making replacement difficult.

Challenge

- The Indonesian fleet is very old (average) and needs urgent replacement through a rolling program.
- A likely change in strategic orientation with more focus on RoPax.
- RoPax ships not available in demanded quantities on used market.
- Need to establish commonality across the fleet.
- Second hand small container ship market is tight and almost obsolete.
- Need to comply with safety and environmental standards.

Large scale new built program

High upfront costs (CAPEX) hard for shipping lines to finance!

SHIPPING DEVELOPMENT FUND

WORLD BANK GROUP

Sale & Purchase Market

Name	Type	Built	LM	LOA	Pax	Sellers	Buyers	Agreed	US$	Comment
Ciudad De Alcudia	ROPAX	1994	3,048	183	558	Grimaldi	United Marine Egypt	Mar-24	$19.62	Gulf
Urd	ROPAX	1981	1,350	171	186	Stena RoRo	Sealines	Feb-24	$4.36	Scrap
Greifswald	ROPAX	1988	1,578	190	156	UKR Ferry	Rosmoport	Dec-23	$9.81	Scrap
Straitsman	ROPAX	2005	1,200	124	400	Strait Shipping	Condor Ferries	May-23	$35.97	UKRelief
Sea Anatolia	ROPAX	1991	2,000	179	200	Sealines	Blue Wave Corp.	May-23	$16.35	Med
Ciudad de Mahon	ROPAX	2000	1,890	179	637	Trasmed	Grimaldi	Dec-21	$32.70	Med
Liverpool Seaways	ROPAX	1997	2,132	186	350	DFDS	La Meridionale	Sep-19	$31.07	Med
Euro Endeavour	ROPAX	2000	2,000	179	351	P&O Ferries	Eckero Linen	May-19	$30.25	Med
Visemar One	ROPAX	2010	2,860	186	560	Visentini	Balearia	Aug-18	$59.95	Refit
Levante	ROPAX	1994	1,780	150	100	Balearia	Bulgarians	Dec-16	$14.17	Black Sea
Finnsailor	ROPAX	1987	1,647	157	119	Navirail	DFDS	Oct-16	$9.81	Relief ship
Euroferry Brindisi	ROPAX	1996	2,400	168	200	Grimaldi	Polferries	Nov-14	$35.43	Baltic
Finhansa	ROPAX	1994	3,200	183	90	Finnlines	Grimaldi	Nov-14	$32.70	Med
Hoa Sen	ROPAX	2001	2,255	186	399	Vinashin	Stena RORO	Oct-13	$20.17	Korea
Norman Bridge	ROPAX	1999	1,950	179	399	HSH Nord Bank	Equinox Offshore	Sep-12	$21.80	Tramp
Dueodde	ROPAX	2005	1,211	124	600	Bornholms Traf.	Straits shipping NZ	Sep-10	$29.98	NZ
Dublin Seaways	ROPAX	1997	2,150	186	320	DFDS	Stena RORO		$26.16	Relief ship
Hartmut Puttman	ROPAX	1993	1,650	150	130	Moby Lines	Al Etihad Int.		$14.17	Gulf ferry

New Built Program

- Today there are approximately 700 large RoRo/RoPax older than 25 years (Clarkson) and need to be replaced soon due to environmental regulations (2030).
- Due to complexity of RoRo/RoPax ships only 20 ships a year can be produced at specialist shipyards. Until to 2030, 700 ships need to be replaced with only 150 build slots available.
- Indonesia currently does not have the shipping yard capacity nor capability to execute the program.
- Capability to built small and medium size RoPax (cheap) but not up to international standards → potential resell value and future compliance.
- Program should also be about potential partnerships with experienced shipyards and developing domestic capacity (transfer of knowledge and skills).

Concept of the fund

GOVERNMENT CAPITAL INJECTION

SOUVEREIGN WEALTH FUND

PENSION FUND

STARTING CAPITAL

Concept of the fund

GOVERNMENT CAPITAL INJECTION

SOUVEREIGN WEALTH FUND

PENSION FUND

STARTING CAPITAL

FLEET PROCUREMENT

Concept of the fund

FLEET PROCUREMENT

(DESIGN AND SUPERVISION)

Concept of the fund

FLEET PROCUREMENT
(DESIGN AND SUPERVISION)

TANGIBLE ASSETS (VESSELS)

A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

Built vessels (mass customized) for which there is a real demand!

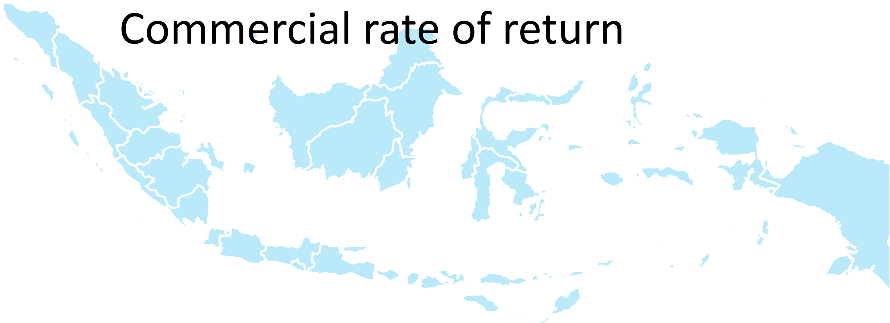
Concept of the fund

FLEET PROCUREMENT
(DESIGN AND SUPERVISION)

TANGIBLE ASSETS (VESSELS)				LONG TERM HIRE
A	B	C	D	→ BAREBOAT CHARTERS
E	F	G	H	→ BAREBOAT CHARTERS
I	J	K	L	→ BAREBOAT CHARTERS
M	N	O	P	→ BAREBOAT CHARTERS / BAREBOAT CHARTERS

Built vessels (mass customized) for which there is a real demand!

Commercial rate of return



Critical Indicators

- Available fleet and condition
- Percentage on-hire
- Firm period and optional charter period (future revenue)
- Profit margin (commercial, reliable)
- Book value vs market value
- Profits
- Reserves ⟶ fleet expansion ⟶ timing

Summary

- Fleet renewal crucial
- Large number of relatively small ships needed
  - Container ships 500 to 3.500 TEU
- Orientation towards RoRo/RoPax
  - Connect remote regions to consolidation areas
  - Time sensitive goods
  - Different product/market combination for PT Pelni
  - Cooperation between PT Pelni and PT ASDP
- Mass customization of fleet to achieve commonality
- National Shipping Development Fund
  - Improve access to finance
  - De-risking for operators (CAPEX → Long Term Hire → Cashflow)
  - GOOD fund management !

Thank You

Terima Kasih

Daniel Alexander
van Tuijll

WORLD BANK GROUP