Infrastructure Funding from an Investor's Perspective

by Mohamad Hafiz Kassim

Employees Provident Fund

KWSP | EPF

HOW DO PENSION FUNDS MANAGE ASSETS?

EMPLOYEES PROVIDENT FUND

CANADIAN PENSION PLAN INVESTMENT BOARD

GOVERNMENT PENSION INVESTMENT FUND

OBJECTIVES AND GOALS

- Preserve and enhance value of capital
- Maintain stable and consistent returns over long term within tolerable risk limits

STRATEGIES

- Diversification by asset classes and region
- Timeframe

ASSET ALLOCATION

- Reviewed periodically
- Incorporates views on market conditions, regulatory and accounting requirements
- Reflects growth in pension funds' investment asset size

ASSET ALLOCATION: A COMPARISON

EPF

FIXED INCOME	51%
PUBLIC EQUITY	36%
REAL ESTATE AND INFRASTRUCTURE	10%
MONEY MARKET	3%

Source: EPF Annual Report 2017

CANADIAN PENSION PLAN INVESTMENT BOARD

FIXED INCOME	40%
PUBLIC EQUITY	26%
REAL ASSETS*	34%

**Includes public and private real estate, infrastructure, resources, agricultural land.*

Source: CPPIB Annual Report 2019

GOVERNMENT PENSION INVESTMENT FUND

FIXED INCOME	46%
PUBLIC EQUITY	48%
SHORT-TERM ASSETS	6%

Source: GPIF 3Q18 Report

Key drivers: Long-term objectives, risk-return profile and life expectancy of contributors

ROLES OF FIXED INCOME IN A RESILIENT PORTFOLIO

CAPITAL PRESERVATION

- **Return** of **principal** upon maturity, which makes bonds an **effective capital preservation** tool (**Issuer** of **high credit quality**).

DIVERSIFICATION

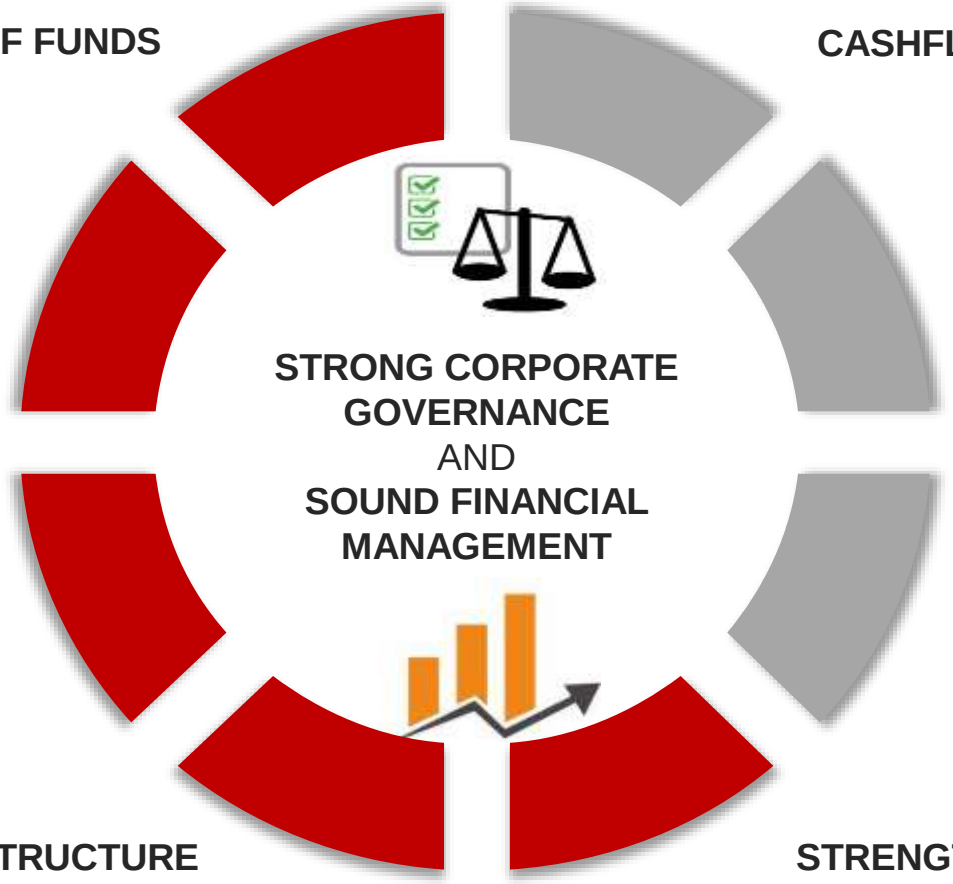
- Provides **diversification** to other asset classes.

INCOME

- Steady stream of **income** in the form of **coupon payments.**

Capital preservation should be paramount in investors' mind when building a resilient portfolio

HOW DO FIXED INCOME INVESTORS MAKE DECISIONS?



STRUCTURE

CREDIT ATTRACTIVENESS

All factors are equally important in financing considerations to ensure capital preservation

DISCLAIMER

CASE STUDY: JIMAH EAST POWER SDN BHD

BACKGROUND

Company Background

Established to develop, design, construct and operate a 2x1000 megawatt ultra-supercritical coal-fired power plant with a 25-year power purchase agreement with TNB.

Location

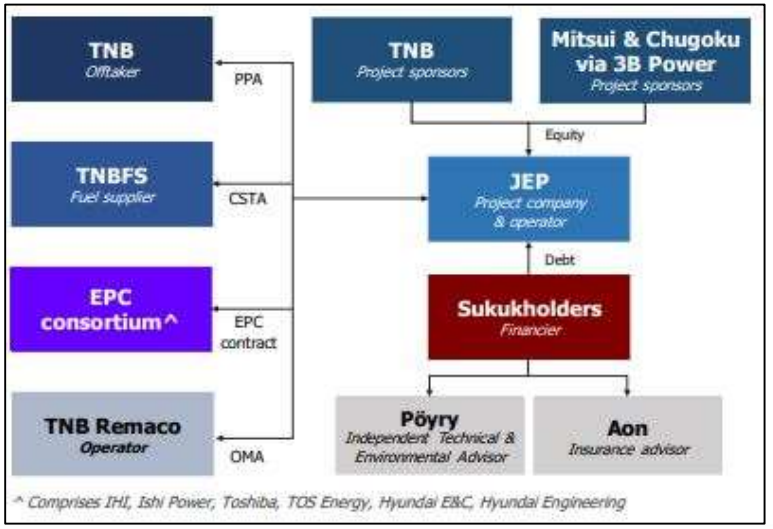
Jimah, Negeri Sembilan.

Sources and Uses of Funds

Sources of Funds	RM'mil	%
Share Capital	5	0%
RPS	2,627	23%
Sukuk Murabahah	8,980	77%
Total	**11,612**	**100%**

Uses of Funds	RM'mil	%
EPC and other hard costs	8,872	76%
Development and pre-operating expenses	314	3%
Consumables, fuel stockpile and spares	635	5%
Financing Costs	1,975	17%
Reserve accounts	6	0%
Pre-SC OD2 operating cash flows	(189.70)	-2%
Total	**11,612**	**100%**

Key Counterparties



KWSP | EPF

CASE STUDY: JIMAH EAST POWER SDN BHD

EXAMPLE OF A STRONG STRUCTURE

SHAREHOLDERS' STRENGTH

- TNB and 3B Power undertakes to maintain a minimum of 95% shareholding interest in Project Company, collectively.
- Project Sponsors TNB and Mitsui provided corporate guarantee respective to their equity contribution for capital contribution to address any project cost overruns relating to variances in exchange rates.

CAPITAL STRUCTURE

- Project cost to be funded by debt to equity ratio of 77.3:22.7, with RM8.98 billion debt and RM2.63 billion equity, on a pro-rata basis corresponding with utilisation of Sukuk proceeds.

SENIORITY OF BONDHOLDERS VS. EQUITY HOLDERS

- Post-completion of Project, all funds in the revenue account will be used to pay operating expenses, fees related to Sukuk, Sukukholders' obligations and lastly, distribution to shareholders.

ACCESS TO CASH

- Maintaining, operating and signatories of revenue accounts by both Security Agent and Issuer.

UTILISATION OF FUNDS

- Project related uses only.

A strong structure would have all the factors fulfilled

CASE STUDY: SOUTHERN POWER GENERATION

BACKGROUND

Company Background

Incorporated to develop a 2x720MW combined-cycle gas turbine ("**CCGT**") power plant under a 21-year PPA with TNB.

Location

Pasir Gudang, approximately 30KM east of Johor Bahru.

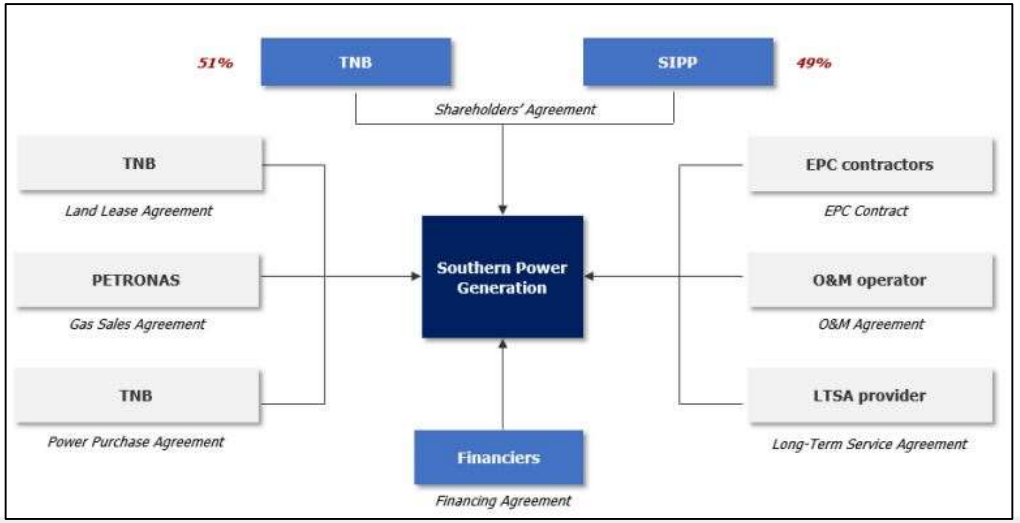
Sources and Uses of Funds

Sources of Funds	RM'mil		%
Share Capital	10.0		0.2
RPS	906.3	*	19.8
Sukuk	3,665.0		80.0
Total	**4,581.3**		**100.0**

**RPS of RM506.3 mil will be utilised to redeem the junior facility post commercial operation date*

Use of Funds	RM'mil	%
EPC costs	3018.7	65.9
Development expenses	573.1	12.5
Taxes and duties	158.5	3.5
Contingency	120.7	2.6
Profit payment during construction	525.6	11.5
Pre-funding finance service reserve account (FSRA)	184.5	4.0
Total	**4581.1**	**100.0**

Key Counterparties



KWSP | EPF

CASE STUDY: SOUTHERN POWER GENERATION

ANOTHER EXAMPLE

SHAREHOLDERS' STRENGTH

- ✓ TNB has demonstrated strong commitment by its undertaking to maintain a 51% shareholding interest in Southern Power throughout the Sukuk tenure.
- ✓ Sponsors have given irrevocable commitments to provide any capital contribution shortfall.

CAPITAL STRUCTURE

- ✗ Project cost to be funded by debt to equity ratio of 80:20, with RM3.7 billion debt and RM916.3 million back ended equity.

SENIORITY OF BONDHOLDERS VS. EQUITY HOLDERS

- ✓ Post-completion of Project, all funds in the revenue account will be used to pay operating expenses, taxes and duties, Sukukholders' obligations and lastly, junior facility.

ACCESS TO CASH

- ✓ Maintaining, operating and signatories of revenue accounts by both Trustee and Issuer.

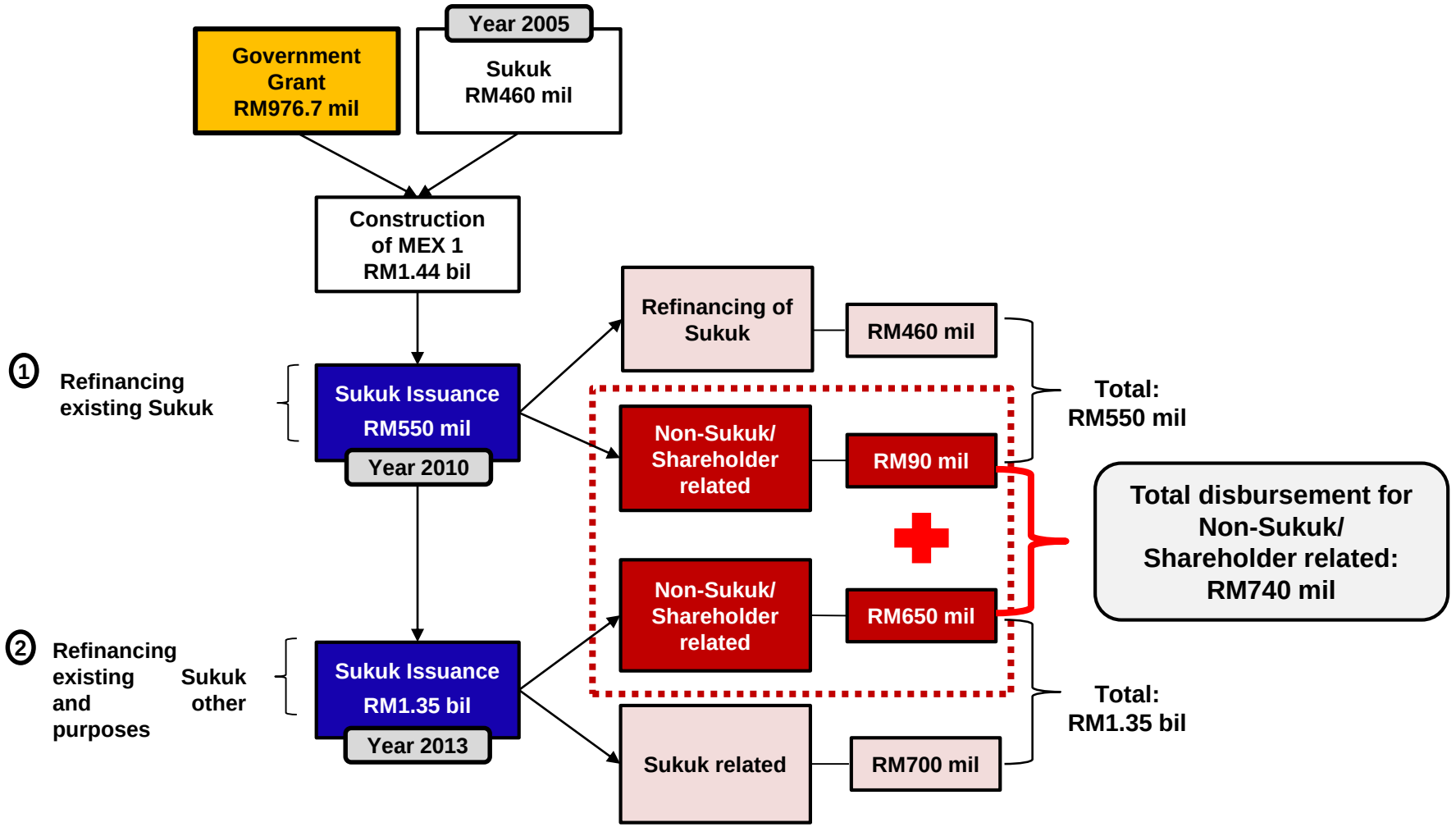
UTILISATION OF FUNDS

- ✓ Project related uses only.

As all factors are equally important, we did not participate in Southern Power from a hold-to-maturity perspective

CASE STUDY: BRIGHT FOCUS BHD

BACKGROUND



CASE STUDY: BRIGHT FOCUS BHD

EXAMPLE OF A WEAK STRUCTURE

SHAREHOLDERS' STRENGTH

✗ No strong commitment from shareholder to remain its major shareholding throughout the Sukuk tenure. Shareholder is allowed to reduce from 100% to subsidiary level.

CAPITAL STRUCTURE

✗ Debt to equity ratio of 95.7:4.3, with 1.35 billion debt and RM58.1 million equity.

SENIORITY OF BONDHOLDERS VS. EQUITY HOLDERS

✓ Funds in operating account will be used to pay operating expenses, taxes and duties, Sukukholders' obligations and lastly, shareholders.

ACCESS TO CASH

✗ Maintaining, operating and signatories of operating accounts solely by Issuer.

UTILISATION OF FUNDS

✗ For Sukuk (Issuer) and non-Sukuk (Shareholder) related.

A weak structure leads to corporate governance issues and financial mismanagement

CASE STUDY: ASFINAG, AUSTRIA

LEGAL FRAMEWORK

- Governed by private law and is 100% owned by the Republic of Austria.
- *Usus fructus* contract enables ASFINAG to collect tolls for the Austrian primary road network.
- Concession period is unlimited.

FINANCIAL ASPECTS

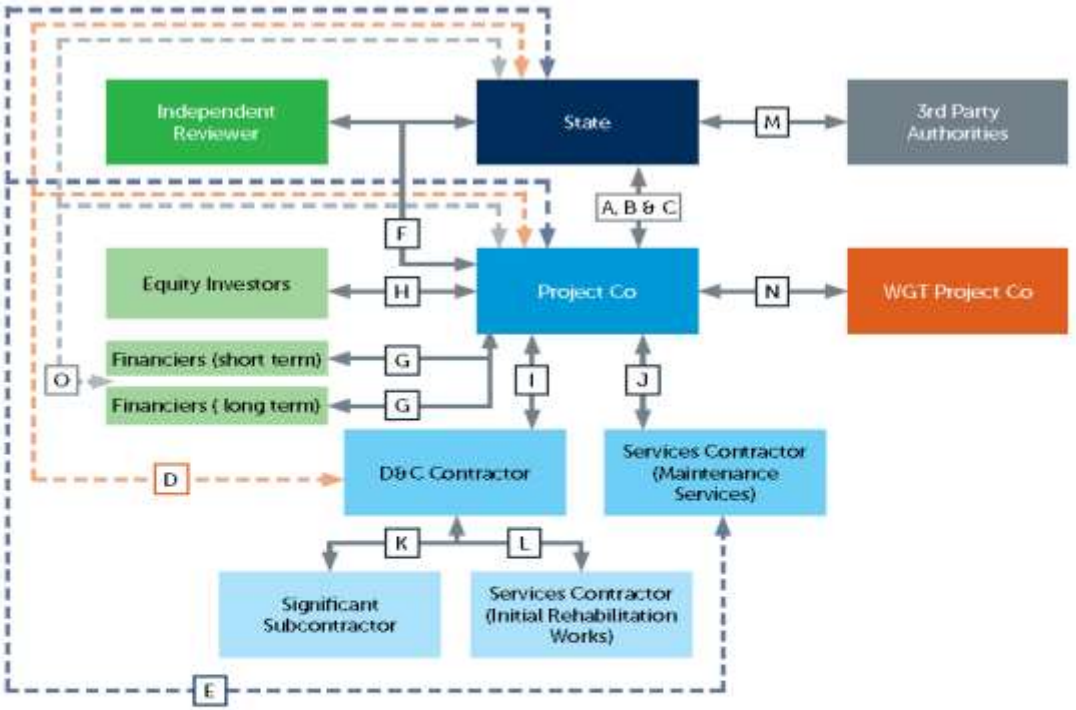
- Toll fee is distance dependent for vehicles weighing above 3.5 tonnes and time dependent for lighter vehicles.
- For tunnels, light vehicles pay a distance related toll.
- Tariffs for lighter vehicles are distinguished between motorbikes and passenger cars.

OBLIGATIONS

- To maintain, operate and finance the current highway.
- To build new concession sections as set in the Federal Road Act. All expenses are financed from the ASFINAG budget.

ASFINAG
VERLÄSSLICHKEIT AUF ALLEN WEGEN.

CASE STUDY: VICTORIA WESTERN ROADS



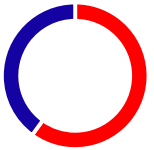
Ref	Project Document
A	Project Deed
B	State Security
C	Initial License
D	D&C Contractor Direct Deed
E	Services Contractor Direct Deed
F	IR Deed of Appointment
G	Financier Loan Agreements
H	Equity Investor Agreements

Ref	Project Document
I	D&C Contract
J	Service Contractor Agreement
K	D&C Sub Contracts
L	IRW Sub Contract
M	3rd Party Agreements
N	WGT / OSARs Interface Agreement
O	Finance Direct Deed

PUBLIC PRIVATE PARTNERSHIP

Between Victorian Government, Netflow and Cintra to deliver the Western Roads upgrade in Melbourne, Australia.

FINANCING STRUCTURE



Long term financing to match concession term	60%
Short term financing by Sponsors partially paid by State or refinanced by Sponsor upon COD	40%

AVAILABILITY BASED SERVICE PAYMENT

CAPITAL COMPONENT
Repayment of capital and interest for road upgrade works.

MAINTENANCE COMPONENT
Management cost for delivery of services by Sponsor.

LIFECYCLE COMPONENT
Lifecycle cost for delivery of major upgrades to Maintenance Network by Sponsor.

ALIGNMENT OF INTEREST

COMPLETION GUARANTEE

AVAILABILITY BASED PAYMENT
Based on satisfactory maintenance and upgrade works