ECAs’ New Roles in Ship Finance and Kexim’s Plan in Busan
Table of Contents

- ECAs’ Ship Finance in General
- Activity in the Project Bond Market
- Capturing Opportunities in Equity Investment
- Kexim’s Plan in Busan with Marine Finance Center
ECAs’ Ship Finance in General
ECAs’ Ship Finance in General

Where are the top ship yards?

Deliveries by Country/Region (Million GT)

- China
- Korea
- Japan
- Europe

Orderbook by Shipyard in May 2015

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>No</th>
<th>m.CGT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Daewoo</td>
<td>127</td>
<td>8.1</td>
</tr>
<tr>
<td>2</td>
<td>Samsung HI</td>
<td>93</td>
<td>5.5</td>
</tr>
<tr>
<td>3</td>
<td>Hyundai HI</td>
<td>94</td>
<td>4.7</td>
</tr>
<tr>
<td>4</td>
<td>Hyundai Samho HI</td>
<td>85</td>
<td>3.7</td>
</tr>
<tr>
<td>5</td>
<td>Hyundai Mipo</td>
<td>139</td>
<td>3.1</td>
</tr>
<tr>
<td>6</td>
<td>Hudong Zhonghua</td>
<td>53</td>
<td>2.5</td>
</tr>
<tr>
<td>7</td>
<td>Shanghai Waigaoqiao</td>
<td>66</td>
<td>2.2</td>
</tr>
<tr>
<td>8</td>
<td>Jiangsu New YJZ</td>
<td>90</td>
<td>2.0</td>
</tr>
<tr>
<td>9</td>
<td>Sungdong SB</td>
<td>76</td>
<td>2.0</td>
</tr>
<tr>
<td>10</td>
<td>HHIC-Phil. Inc.</td>
<td>39</td>
<td>1.8</td>
</tr>
</tbody>
</table>

* Source: Clarksons
Possessing Expertise in Ship Finance

<table>
<thead>
<tr>
<th>Establishment</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governing Authority</td>
<td>Ministry of Strategy and Finance</td>
</tr>
<tr>
<td>Product</td>
<td>Loan and Guarantees</td>
</tr>
<tr>
<td>Equity</td>
<td>U$8.7bn</td>
</tr>
<tr>
<td>Ownership</td>
<td>100% Government-owned</td>
</tr>
</tbody>
</table>
| Rating('14.9) | Moody’s : Aa3(Stable)  
S&P : A+(Positive)  
Fitch : AA-(Stable) |

Source: KEXIM, GIEK, JBIC, CEXIM Annual Report
Kexim as a Leading ECA in Ship Finance

Trend in Loan/Guarantee Commitment

Ship vs. Offshore

2011
11%
89%

2014
56%
44%

2013 Shipping Portfolio League Table

*Source: KEXIM, Marine Money
ECAs’ Project Finance

Traditionally...

- Loans/Guarantee
  - Direct Loan
  - Financial Guarantee
  - OECD guidelines (12yr, full payout)
  - Competitive pricing
  - 100% guarantee

...in the Future

- Derivatives/Leasing
  - Fixed↔Floating Rate Swap
  - Leasing Scheme

New

- Bond
  - ECA Covered Bond

- Equity
  - Eco-Ship Fund
  - Global Maritime Co-investment Framework

- Loans/Guarantee
  - Direct Loan
  - Financial Guarantee

- Derivatives/Leasing
  - Fixed↔Floating Rate Swap
  - Leasing Scheme

- Bond
  - ECA Covered Bond

- Equity
  - Eco-Ship Fund
  - Global Maritime Co-investment Framework

- Repayment
  - Time Charter
  - Charter Fee

- Korean Shipyard
  - Ship Building Contract

- Borrower
  - Loan Agreement

- Commercial Bank
  - Escrow A/C

- Ship Owner

- Charterer

- ECA’s Project Finance

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- Ship Owner

- Charterer
Activity in the Project Bond Market
Trend: Sources are diversifying…

Where has the funding come from?

Capital raising in the Asian maritime industry (2013)

* Source: Marine Money

* * *

ECAs’ Ship Finance in General
ECAs’ Ship Finance in General

...filling the Funding Gap

- Deal size is growing...

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>Contract Price (1 vessel, million)</th>
<th>Deal Size* (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulker</td>
<td>~ 50</td>
<td></td>
</tr>
<tr>
<td>Container</td>
<td>~ 150</td>
<td>300 ~ 800</td>
</tr>
<tr>
<td>Tanker</td>
<td>~ 100</td>
<td></td>
</tr>
<tr>
<td>LNGC</td>
<td>~ 200</td>
<td></td>
</tr>
<tr>
<td>Drillship</td>
<td>500 ~ 800</td>
<td>400 ~ ...???</td>
</tr>
<tr>
<td>FPSO/FLNG…</td>
<td>600 ~ 2,000</td>
<td></td>
</tr>
</tbody>
</table>

*Source: KEXIM's previous deals

- A.P. Moller
  - 18 Containers
  - 3,663mil

- Ichthys LNG
  - CPF, FPSO
  - 4,590mil

- Seadrill
  - 3 Drillships
  - 1,573mil

- Ocean Rig
  - 3 Drillships
  - 1,864mil

- BGT
  - 6 LNGCs
  - 1,337mil

- Golar LNG
  - 2 FSRUs, 6 LNGCs
  - 1,730mil

($100m)

Contract price (by project) KEXIM's commitment (by project)
Activity in the Project Bond Market

Transition from Loan to Bond

**Loan Guarantee**

- **ECA Guarantee**
  - **Banks**
  - **Repayment** → **Loan** → **Buyer**
  - **Bank Loan Market**

**Bond Guarantee**

- **ECA Guarantee**
  - **Investor**
  - **Repayment** → **Bond proceeds** → **Buyer**
  - **Capital Market**

**Growth of ECA-Guaranteed Bonds**

- '00: 79m (2)
- '01~'09: 965m (14)
- '10: 2.6bn (19)
- '11: 291m (2)
- '12: 6.5bn (37)
- '13: 9.3bn (43)

* Source: JP Morgan

**Strength of ECA-Guaranteed Bond**

- **General**
  1. Diversifies funding sources to the capital market
  2. Direct access to broader investor bases
  3. Stable and long term financing/investment

- **Bond Guarantee**
  4. Currently attractive pricing environment
  5. Absorbs otherwise inaccessible liquidity
Activity in the Project Bond Market

Typical Structure

- **KEXIM Financial Guarantee**
  - **Beneficiary**: Commercial Banks
  - **Tenor**: Up to 12 years
  - **Premium**: Upfront
  - **Repayment**: Amortization
  - **Security**: Mortgage, Account Pledge, Earnings Assignment, etc.

- **KEXIM Bond Guarantee**
  - **Beneficiary**: Bond Investors
  - **Tenor**: Up to 12 years
  - **Premium**: Upfront
  - **Repayment**: Amortization
  - **Security**: Mortgage, Account Pledge, Earnings Assignment, etc.
Activity in the Project Bond Market

Case Studies

Direct Loan + Covered Bond

Scorpio Tankers Project

- Investors: Direct Loans
  - KEXIM ($125M)
  - KEXIM ($175M)
  - Commercial Banks ($130M)

- Scorpio Tankers
  - Bond Proceeds ($125M)
  - Loans
  - Repayments

- Option to convert

- Investors
  - Bond Proceeds ($125M)
  - Repayments

- Scorpio Tankers
  - Repayments

- Direct Loans
  - $430M

Navig8 CTI Project

- Investors: Direct Loans
  - KEXIM ($125M)
  - KEXIM ($135M)
  - Commercial Banks ($125M)

- Navig8
  - Bond Proceeds ($125M)
  - Loans
  - Repayment

- Option to convert

- Investors
  - Bond Proceeds ($125M)
  - Repayments

- Navig8
  - Repayments

- Direct Loans
  - U$385M

Guarantee

- $130M

- ($125M)

- ($175M)

- U$385M
Capturing Opportunities in Equity Investment
FIs Emerge as a Game Changer

Capturing Opportunities in Equity Investment

Financial Capital Pool

- Pension Fund, PEF, Commercial Bank
- Insurance Company, IB, Private Investor

Shipping Fund

- Funds purchase (or finance) ships and charter out the ships to shipping companies.
  - e.g. KEXIM Ecoship Fund, KG Fund, KS Fund

MLP

- Shipping companies set up MLPs and invite LPs.
  - Shipping companies play crucial roles as GPs
  - e.g. Teekay, Seadrill, Golar

Leasing Company

- Established by financial institutions (usually commercial banks)
  - Purchase and charter out ships to shipping companies.
  - e.g. Minsheng Leasing
## Kexim’s “Eco-ship Fund”

<table>
<thead>
<tr>
<th>Program</th>
<th>“ECO-SHIP FUND”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Size</strong></td>
<td>KRW 1 Trillion (USD 1 Billion)</td>
</tr>
<tr>
<td><strong>Investment Period</strong></td>
<td>3 year</td>
</tr>
<tr>
<td><strong>KEXIM Investment</strong></td>
<td>KRW 250 Billion (25%)</td>
</tr>
<tr>
<td><strong>Format</strong></td>
<td>Multi Closing, Capital Call</td>
</tr>
<tr>
<td><strong>Program Co-Investors</strong></td>
<td>Pension Funds, Insurance Companies, Commercial Banks, Investment Banks</td>
</tr>
<tr>
<td><strong>Investment Target</strong></td>
<td>Junior debt or equity investment for shipping companies buying Korean “eco-ships” * currently targeting Korean shipping companies</td>
</tr>
<tr>
<td><strong>Currency &amp; Interest Swap</strong></td>
<td>KRW/USD swap</td>
</tr>
</tbody>
</table>
“Eco-ship Fund” Structure

KEXIM ECO-SHIP FUND PROGRAM

1. Korea Eximbank (Portion: 25%)

- KEXIM anchors transactions, making approvals first.

2. Institutional Investors (Participants: 75%)

- Participation subject to own discretion.

Project Manager

Manage Project Funds

Investment

Fund 1

Fund 2

Fund 3

Fund 4

Funds for Each Project (KRW/USD)

SIC (SPC)

SIC (SPC)

SIC (SPC)

SIC (SPC)

Shipping Company

Shipping Company

Shipping Company

Shipping Company

*After review and due-diligence

① Proposal made to KEXIM first
② Proposal made to other participants after KEXIM approval
Capturing Opportunities in Equity Investment

The Born of ‘Co-investment Framework’

Trend in Investment Appetite - Asset Allocation of 28 Global Pensions & Funds

*Source: Financial Focus*
Capturing Opportunities in Equity Investment

The Born of ‘Co-investment Framework’ – Investment Angle

“Global Maritime Co-investment Framework”

- Eco-ship Fund
- Value-up Fund
- KAMCO’s Tonnage
- Conventional Vessel
- Offshore Infrastructure
- Marine Resource
- Global Infrastructure Fund
- ECAs’ direct loans and guarantees
- (Loan, Guarantee)
- Debt Financing
- Traditional Maritime Industry
- Modern Maritime Industry

Equity Investment
Capturing Opportunities in Equity Investment

“Global Maritime Co-Investment Framework”

Deal Sourcing, Advisory

KEXIM, Global Financial Agents

KIC (Korea Investment Corporation)

Pension Funds, IBs

Cofund

“Broad Scope”

“Broad Investor Base”

Co-Investment Framework

Project Fund1

Project Fund2

Project Fund3

Project Fund4

SPV

Offshore Plant

Maritime Infrastructure

Maritime Logistics

Business Acquisition

KEXIM, Global Financial Agents

Pension Funds, IBs

KIC (Korea Investment Corporation)
### Transaction Overview

<table>
<thead>
<tr>
<th></th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asset</strong></td>
<td>3 Ultra-Large Containerships</td>
</tr>
<tr>
<td><strong>Lessor</strong></td>
<td>a SPV owned by FIs</td>
</tr>
<tr>
<td><strong>Lessee</strong></td>
<td>One of European Shipping Companies</td>
</tr>
<tr>
<td><strong>Deployment</strong></td>
<td>One of Major Shipping Alliances</td>
</tr>
<tr>
<td><strong>Ticket Size (Equity)</strong></td>
<td>USD 120M</td>
</tr>
<tr>
<td><strong>Leverage Size (Debt)</strong></td>
<td>USD 360M</td>
</tr>
<tr>
<td><strong>Redemption</strong></td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Yield</strong></td>
<td>&lt; Debt : Equity ratio = 75% : 25%</td>
</tr>
<tr>
<td></td>
<td>- Equity Investment : [Target 10.0% / p.a]</td>
</tr>
<tr>
<td></td>
<td>- Senior Investment : [Target L+ 2.0% / p.a]</td>
</tr>
<tr>
<td><strong>Ongoing Considerations</strong></td>
<td>① Purchase Option Strike Price</td>
</tr>
<tr>
<td></td>
<td>② Periodic Rental Level</td>
</tr>
<tr>
<td></td>
<td>③ Minimal Residual Value Risk</td>
</tr>
</tbody>
</table>

### Diagram

- **Investors**
  - Invest and Own
- **Financiers**
  - Financing Support
  - Manage
- **Co-investment SPV**
  - ① Invest and Own
  - ② Financing Support
- **Shipping Company**
  - ③ Lease & Purchase Option
  - ④ Rental
  - ⑤ Deploy
  - ⑥ Ship Management
- **Ship Manager**
  - ⑥ Manage
- **Alliance**
  - ⑤ Deploy
  - ⑥ Ship Management
  - ④ Rental

Pilot Project - Leasing Solution for Ultra-Large Containerships

Capturing Opportunities in Equity Investment
Kexim’s Plan in Busan with Marine Finance Center
Busan as World’s Transportation and Finance Hub

**Locational Factors**
- Half of Korean major shipyards & 82% of shipbuilding equipment companies are concentrated in Busan & Gyeongnam Province
- Busan Harbor is 5th largest in world’s cargo volume.

**Structural Factors**
- Increasing demand for financial support to struggling Korean shipbuilding / shipping industries
- Designation of Busan as Marine Finance & Financial Derivatives Hub

**Establishment of Marine Finance Center**
(‘14. 9. 29)

- 20th ~22nd Floor
  Busan International Finance Center
  Munhyeon-dong, Nam-gu, Busan
Kexim’s Support to Promote Busan as a Financial Hub

- Keep MFC’s interests aligned with Busan’s Marine Policies
- Provide foreign currency liquidity, finance experiences and co-financing opportunities to local FIs

Implement marine policies

Shipbuilding  | Shipping  | Equipment  | Harbor, Logistics  | Service

Local/International FIs

New Financing Needs

Share marine finance experience

Assist fund raising of local banks

New Financing Needs
Kexim’s Plan in Busan with Marine Finance Center

Strategies to Create Synergy

- **Specialization**
  - CERs Exchange
  - Marine Exchange
  - Comm Exchange
  - Shipping Fund
  - Deriv. R&D Center

- **Network**
  - Associate Backup Center
  - Integrated IT System
  - Deriv. Association
  - Marine Finance Forum

- **Internationalization**
  - Credit-Rating Inst.
  - Settlement Inst.
  - Training Inst.
  - Graduate School

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- **Infra-structure**
- **Human Resource**
- **Attraction**
Thank you