



**STRATEGIE E PREVISIONI DI MERCATO PER LA  
FILIERA DELL'IMPIANTISTICA INDUSTRIALE**



# **Convegno ANIMP 2014**

## **Engineering & Construction: dinamiche competitive e filiere emergenti**

**PRELIMINARE**

**Milano, 30 Ottobre 2014**

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December 2011 → November 2014



The image shows the cover of a report. At the top left is the BAIN & COMPANY logo. To its right are logos for SEZIONE COMPONENTISTICA D'IMPIANTO, ANIMP (ASSOCIAZIONE NAZIONALE DI IMPIANTISTICA INDUSTRIALE), FEDERAZIONE IMPIANTISTICA ITALIANA, Federprogetti, and CONFINDUSTRIA. The main title is 'Analisi della competitività delle filiere dell'Oil&Gas Italiana e Sud-Coreana' with the subtitle 'Convegno ANIMP - Full Report'. The date 'Milano, 1 Dicembre 2011' is at the bottom. A small disclaimer is at the very bottom: 'This information is confidential and was prepared by Bain & Company solely for the use of our client; it is not to be relied on by any 3rd party without Bain's prior written consent.'

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SEZIONE COMPONENTISTICA D'IMPIANTO

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**Analisi della competitività delle filiere dell'Oil&Gas Italiana e Sud-Coreana**  
Convegno ANIMP - Full Report

**Milano, 1 Dicembre 2011**

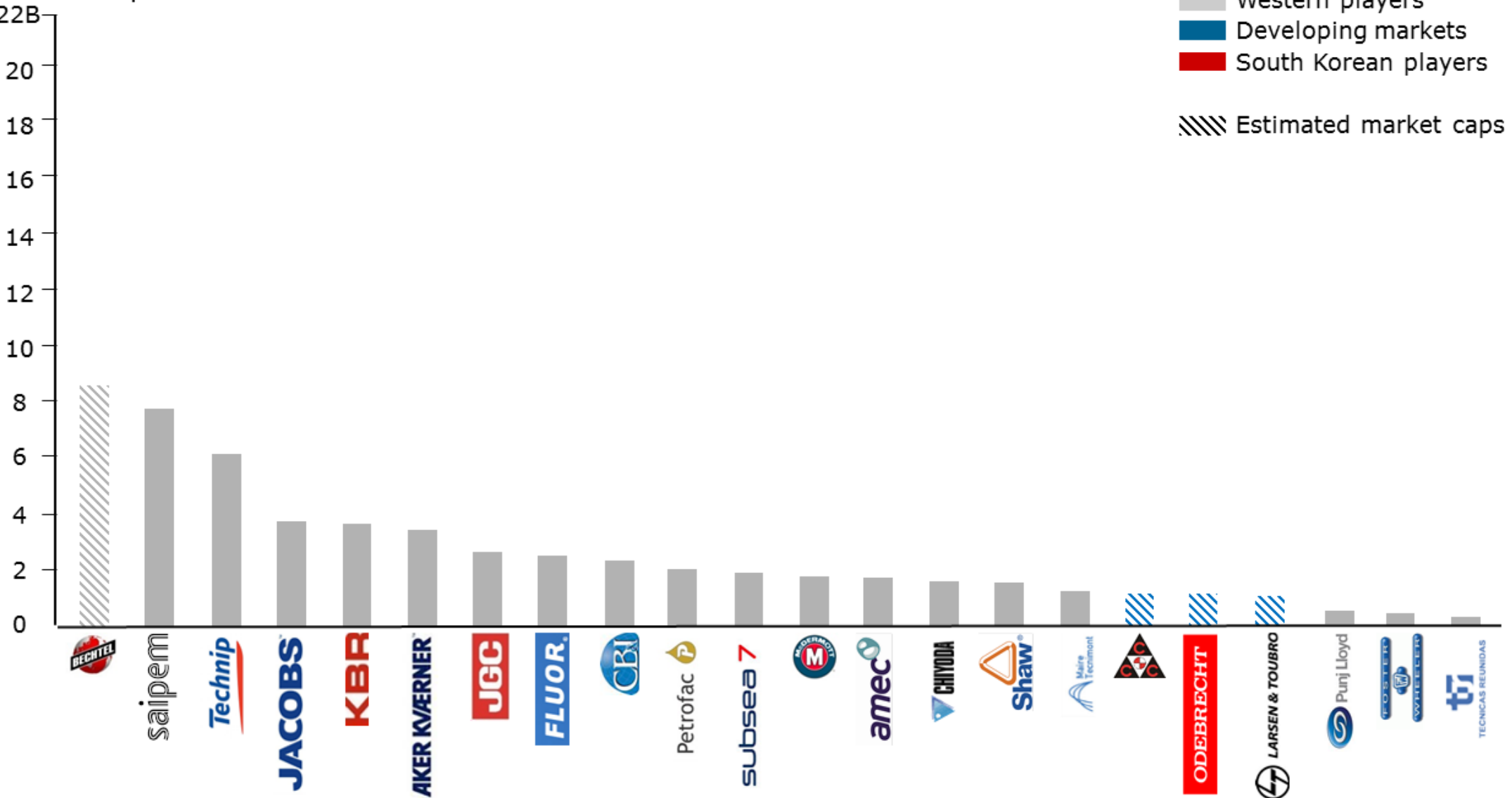
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- **Where do we stand...**
- **... how did we get there ...**
- **... what is next**



# Oil&Gas E&C: Western players, emerging markets and the South Korean competition

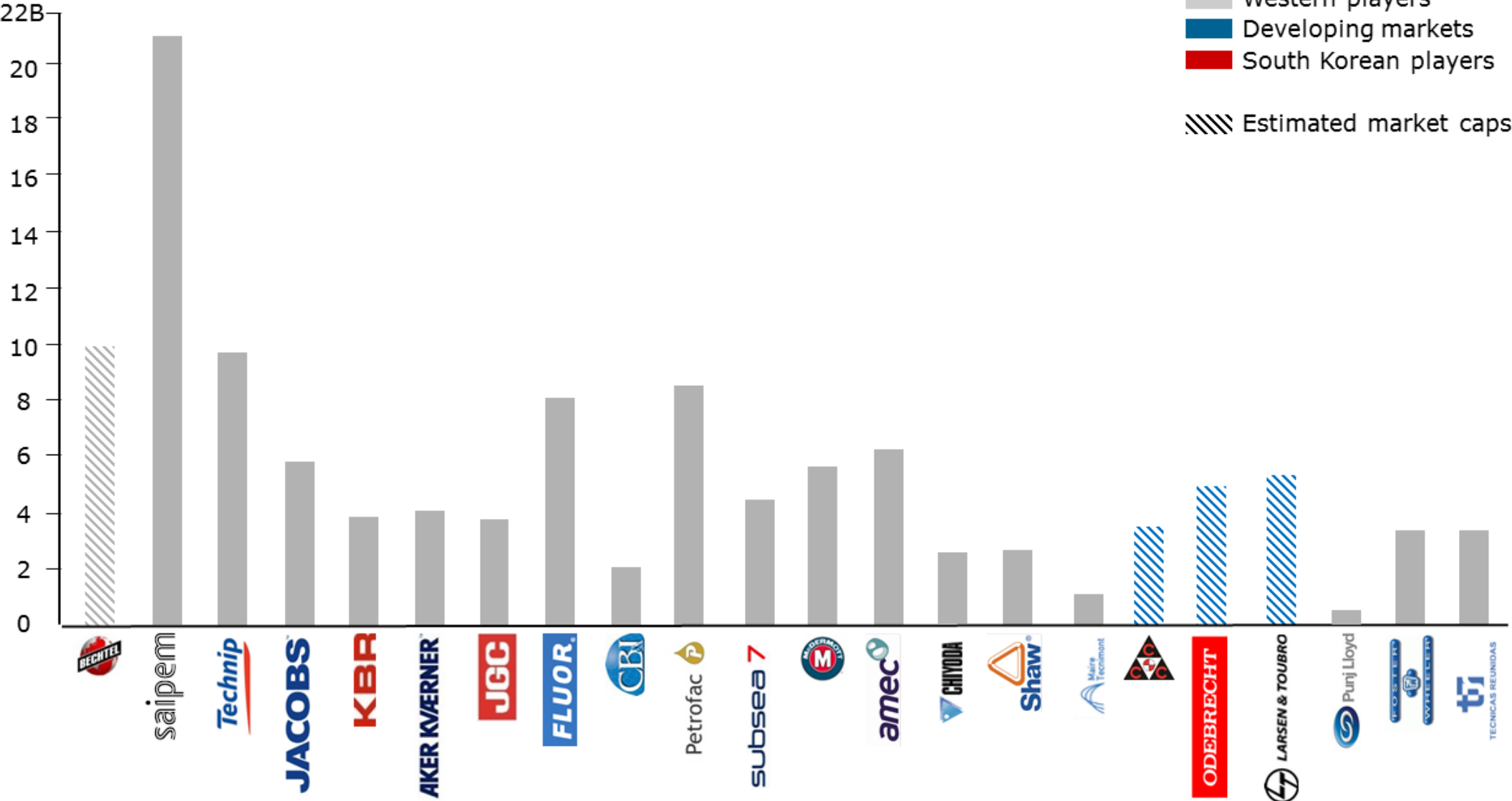
Market cap as of 2005



Source: Lit search

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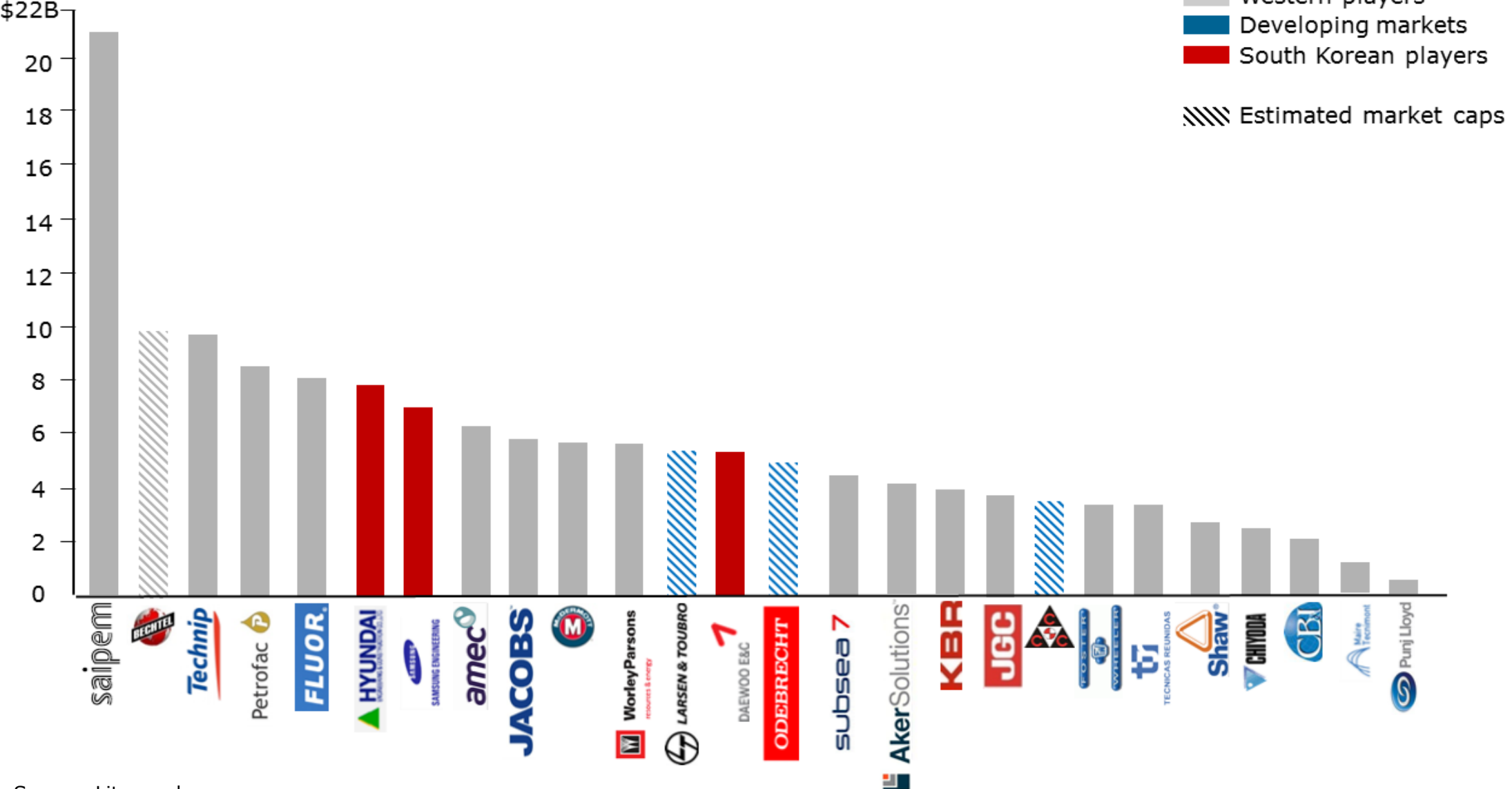
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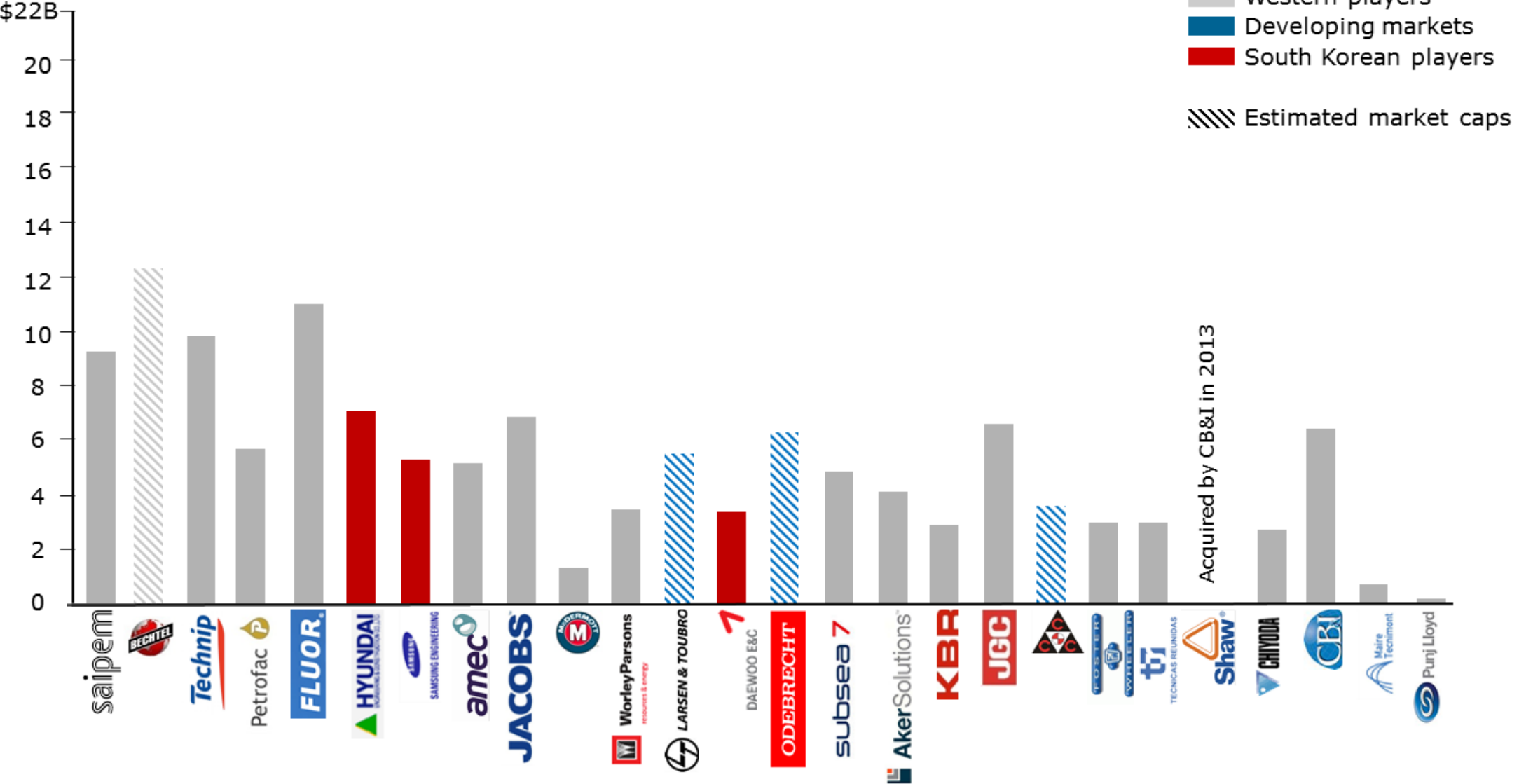


Source: Lit search



# Oil&Gas E&C: Western players, emerging markets and the South Korean competition

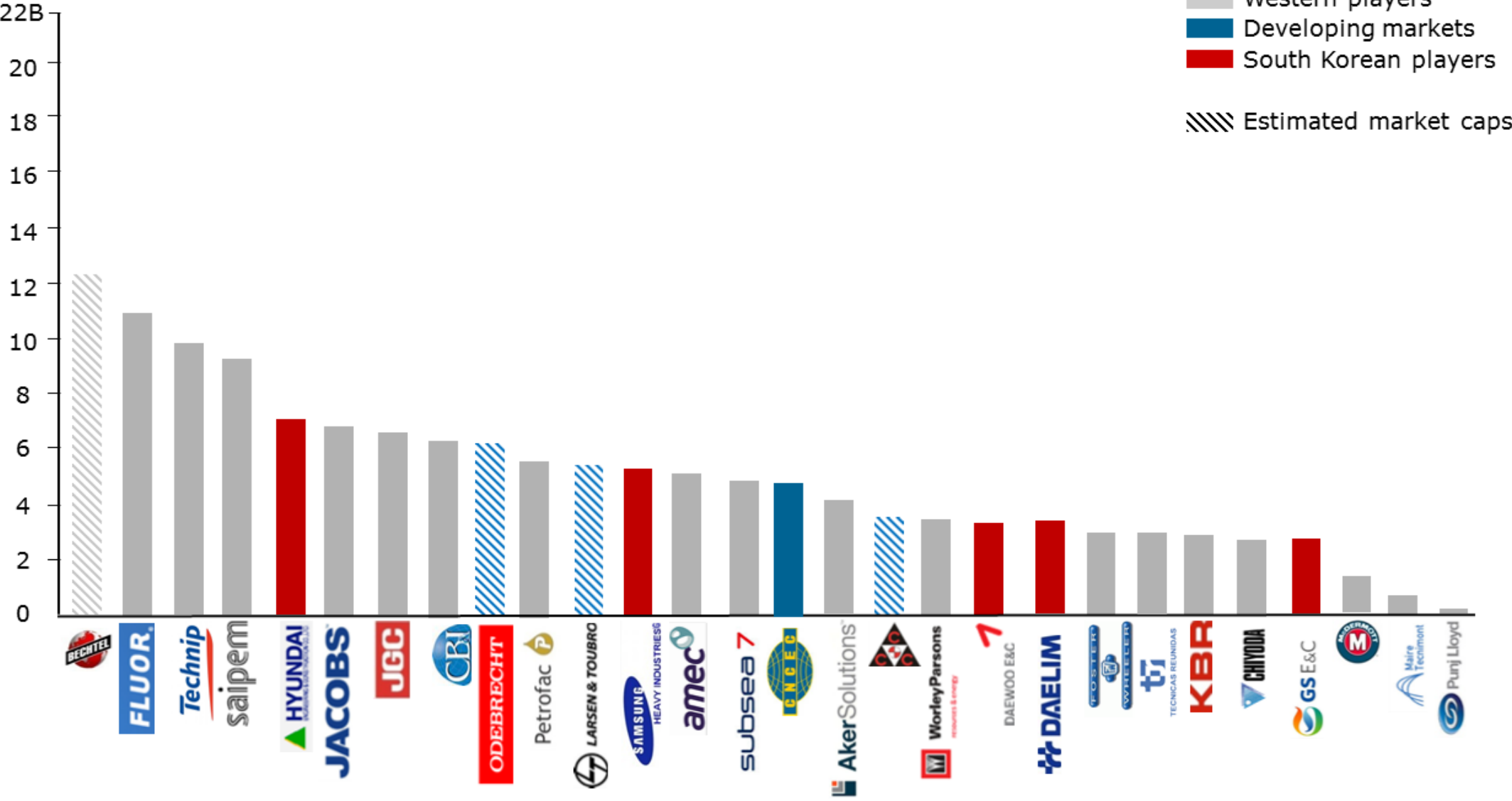
Market cap as of 2014



Source: Lit search

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Market cap as of 2014

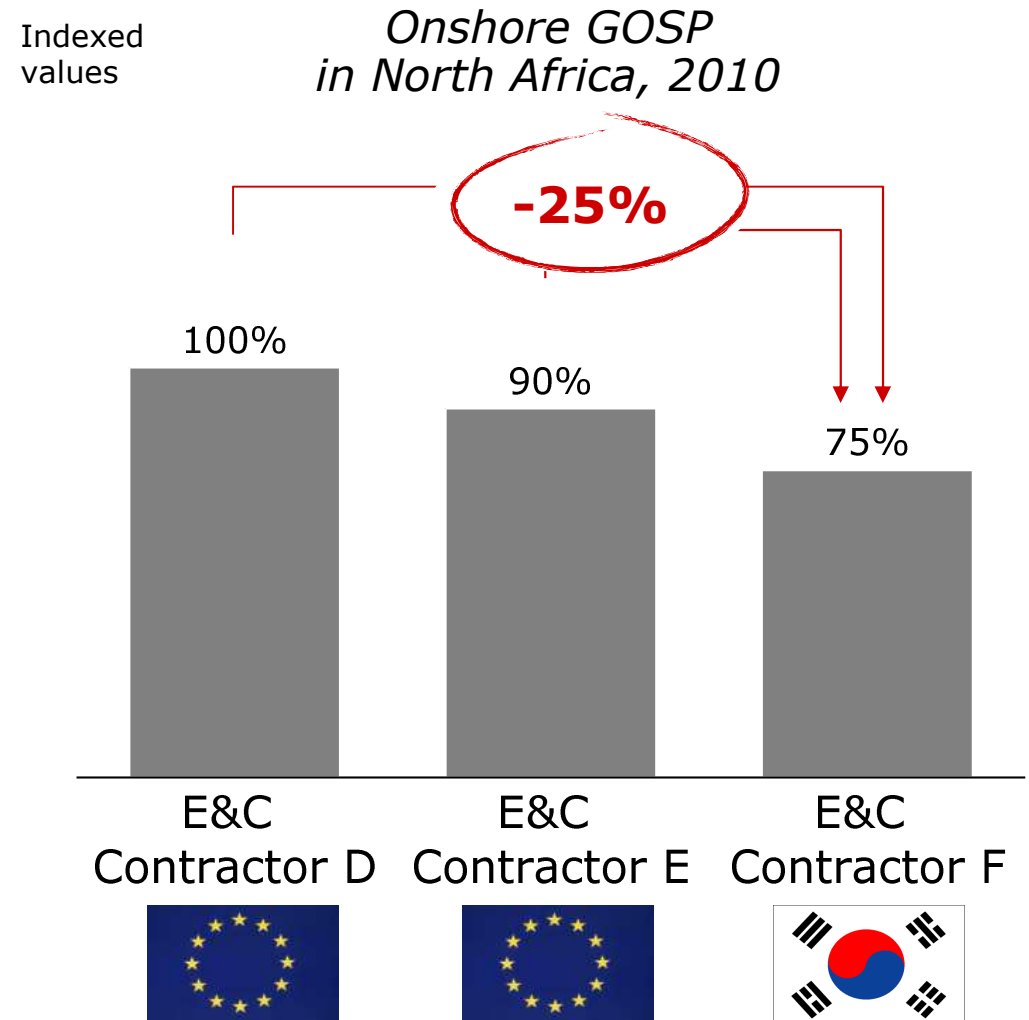
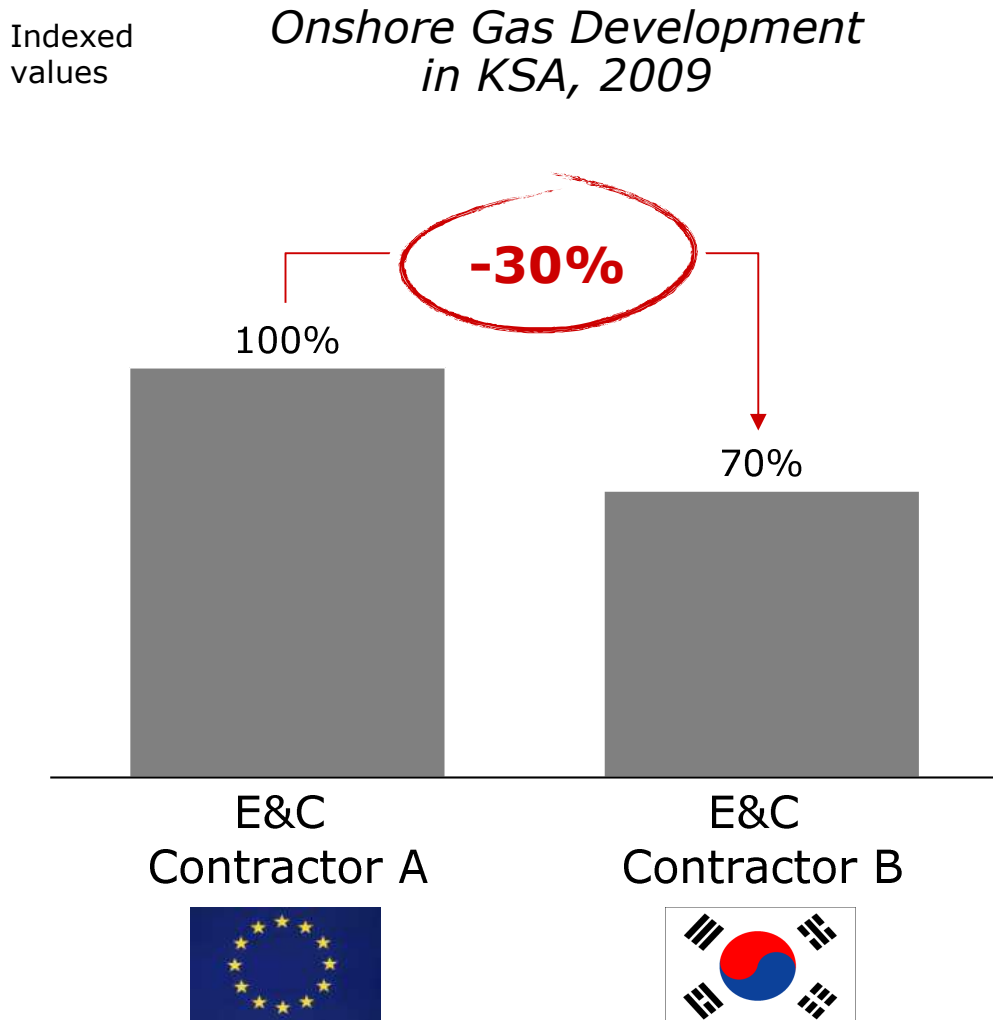


Source: Lit search



# How did we get there

## South-Korean vs. Europe bid prices in 2008-2012



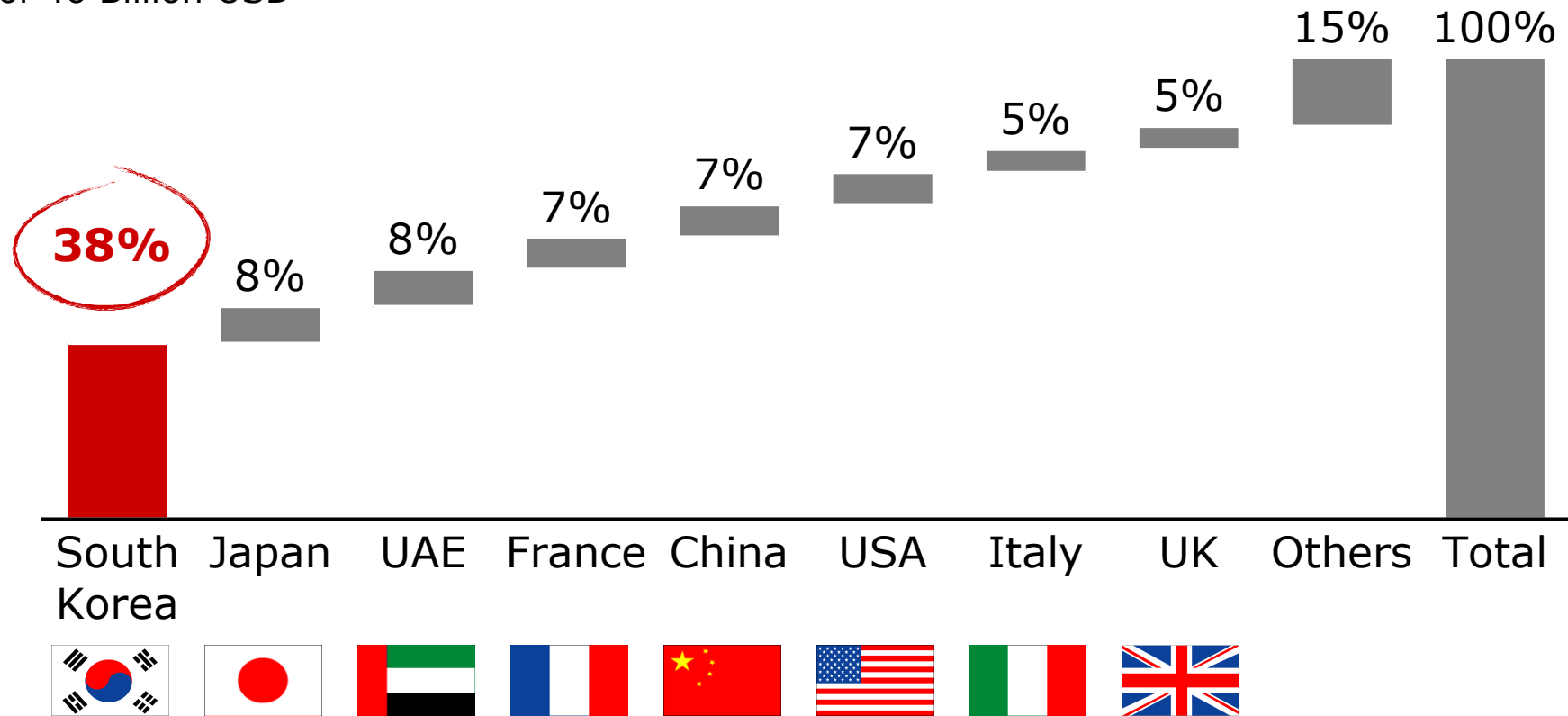
**Market experienced price differential between Western and South Korean value chain in the range of 20/30%**



# Acquisition of the Market Share: South Korean E&C Contractors in Middle East

Orders acquired in Middle East in the period  
April 2009 – March 2010, by Contractors' nationality

Total of 46 Billion USD



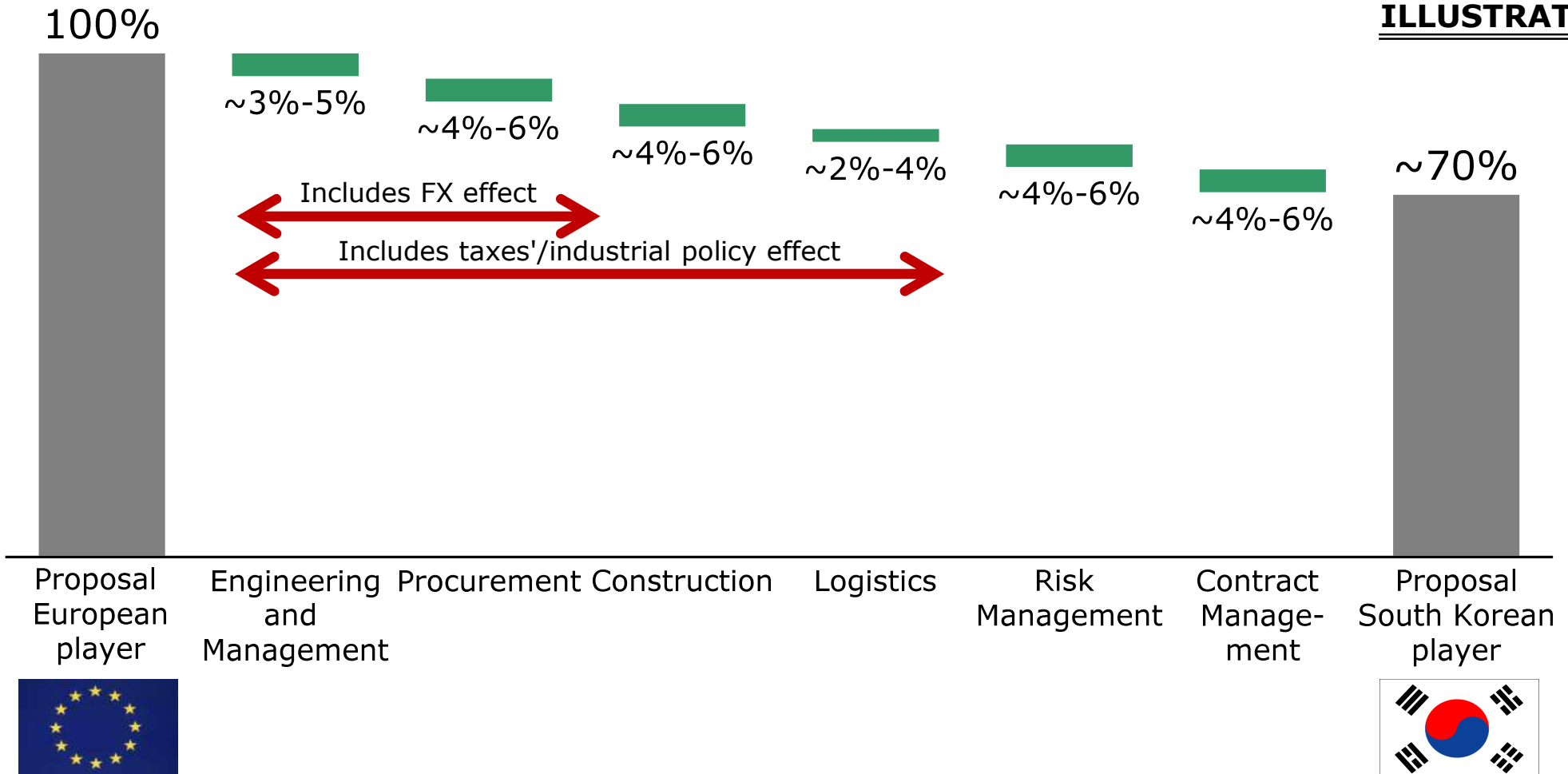
**~40% of new orders in Middle East in 2009 and 2010  
have been assigned to South Koreans E&C companies**

Source: Nomura, November 2010



# Back in 2011 ... synthesis of competitiveness gaps between Western and South Korean players

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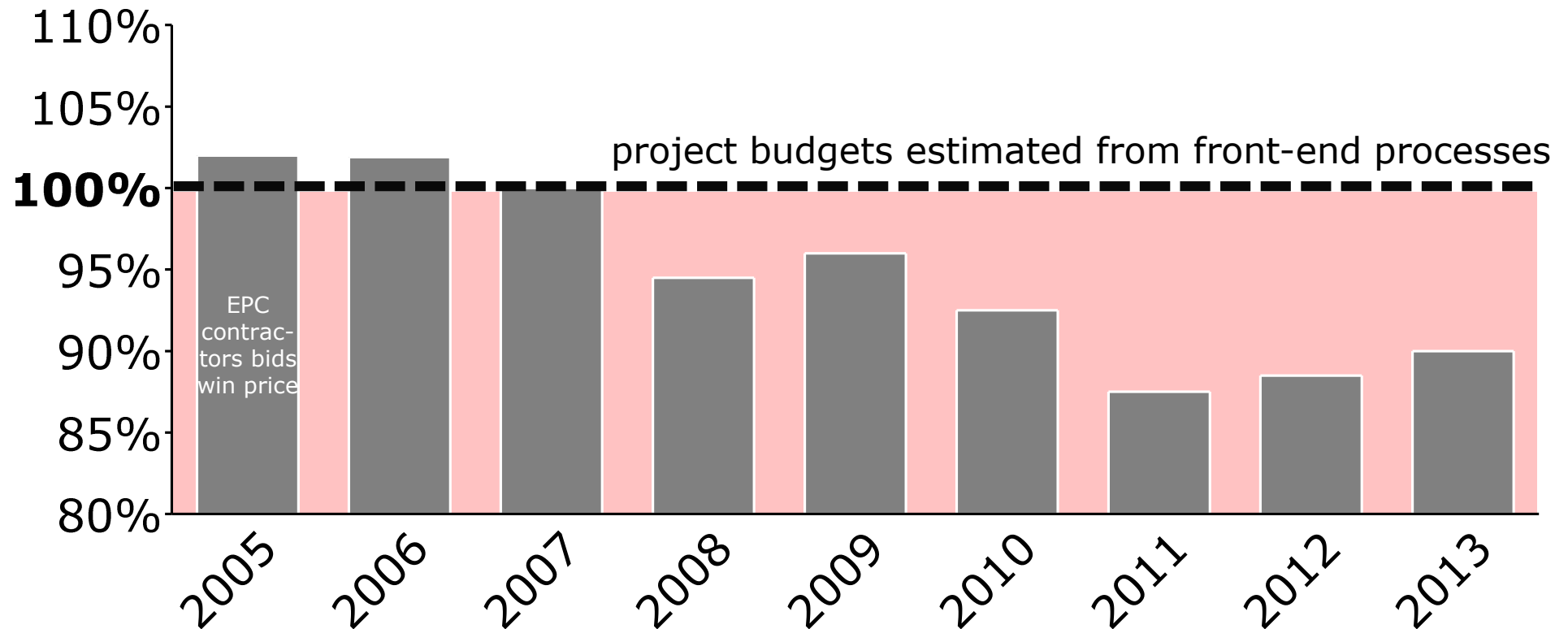


**The South Korean competitive differential was based on the build-up of several elements**

Source: Bain&Co. analysis; expert interviews

# Between 2008 and 2013, the market has been reshaped by competition

## Bid-to-budget ratio, hydrocarbon projects in Middle East



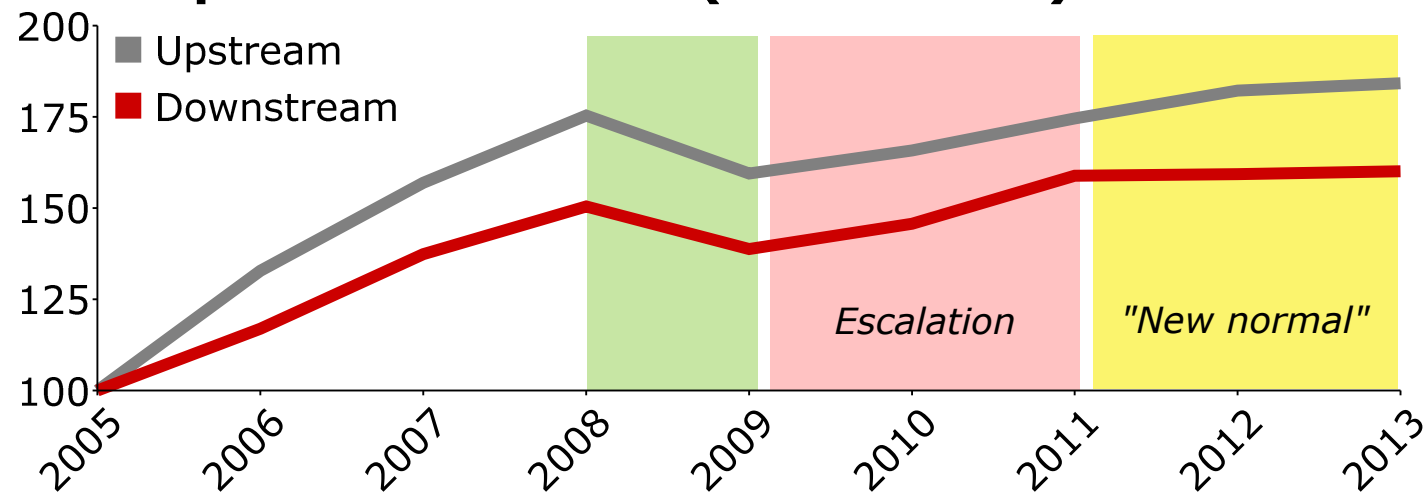
- **Competition has been fierce** for the acquisition of each project in Middle East
  - Sometime players were **bidding below their costs** at the time of bidding
- Consequently, **clients reduced their original budgets estimates** parameters

Note: comparison between prices at which EPC contractors won bids, with original budgets (project budgets estimated from front-end processes)  
Source: MEED, Standard Chartered Research

# Aggressive bidding **has not been counterbalanced** by Procurement and FX trends as in 2007-2008

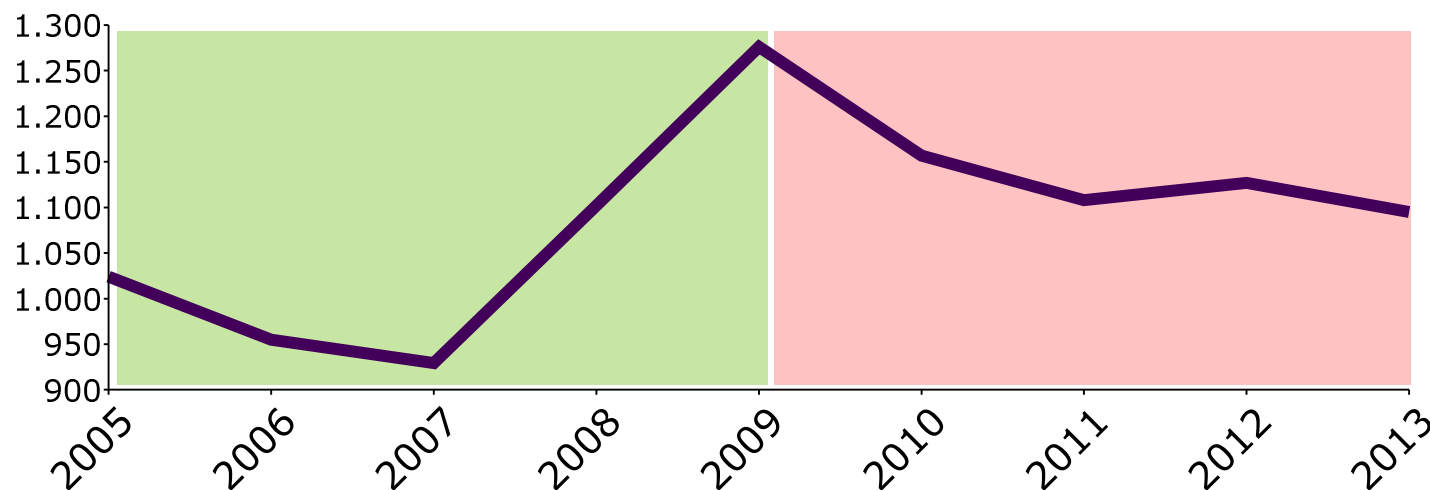
- **cost escalation for raw material and man-labour costs** (Eng. as well as Construction)

**CERA Capital Cost Indices (2005 = 100)**



- **WON strengthened vs USD**

**Average yearly KRW/USD FX rate**



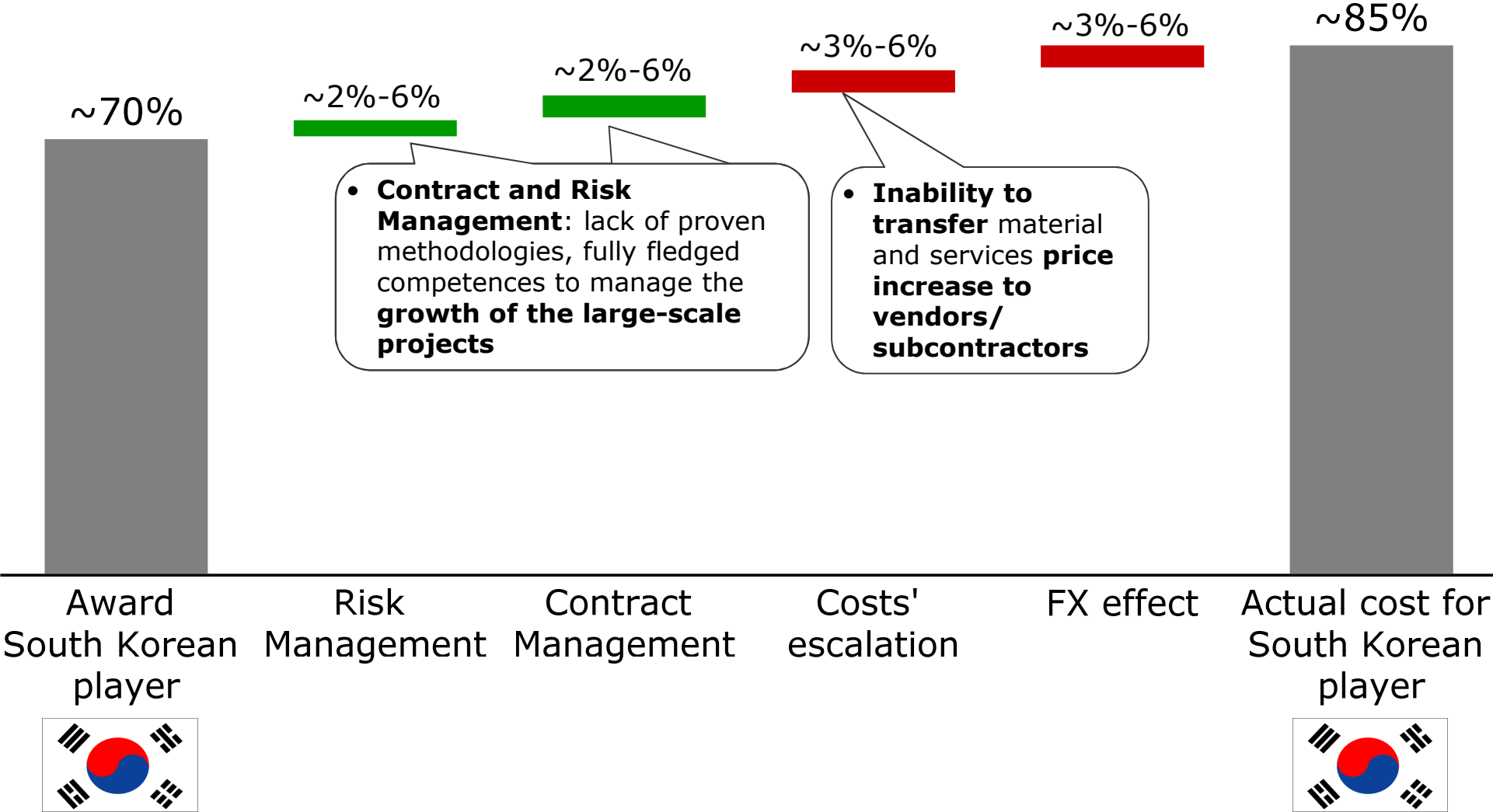
Source: IHS, Oanda.com



# Therefore, some South Korean Value Chain competitive differentials "backfired"...



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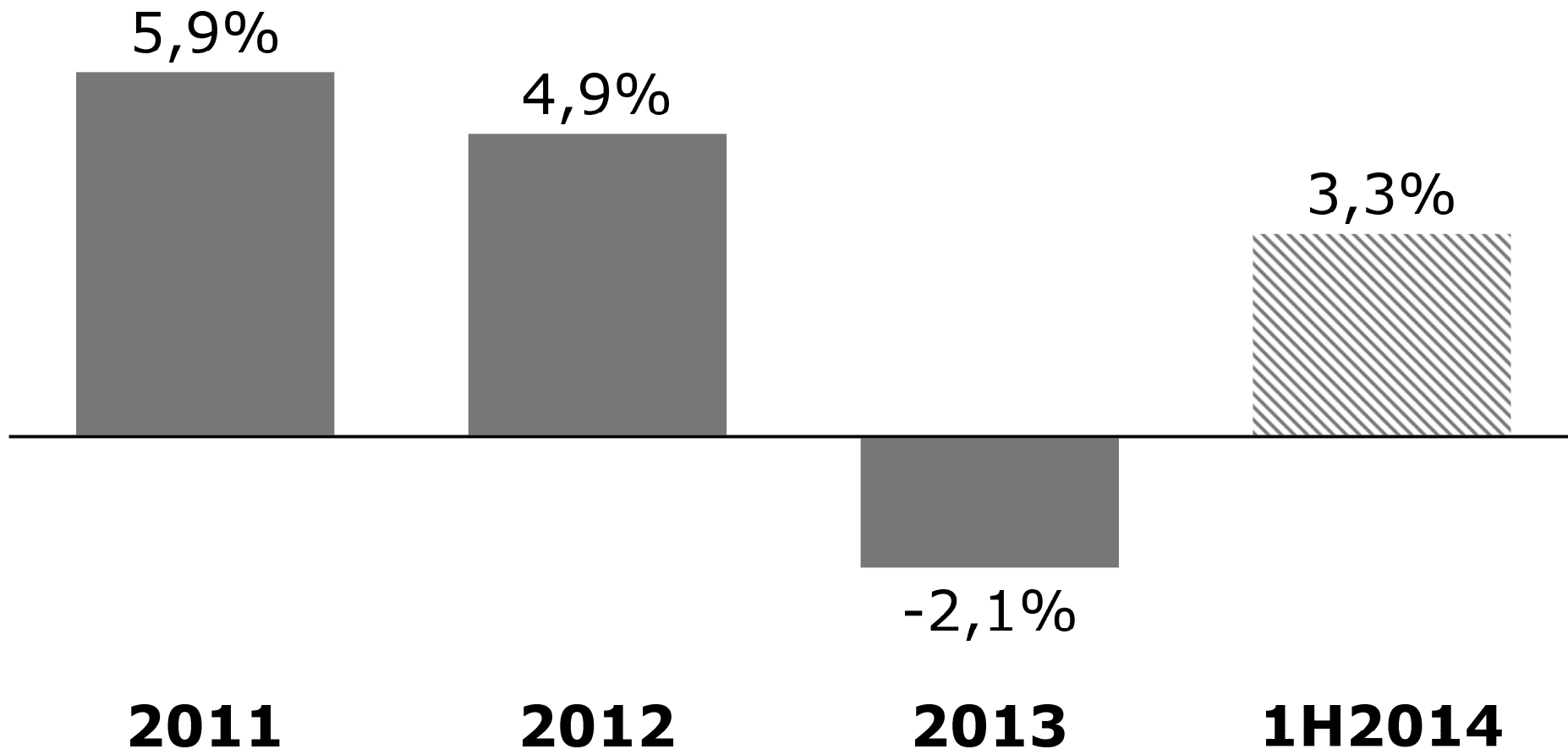


Source: Bain&Co. analysis; expert interviews

# ... and **challenged overall sustainability** of the E&C contractors



## Operating Profit (% of revenues) of top 4 South Korean E&C Contractors



Note: South Korean E&C Contractors considered are Samsung Engineering, GS E&C, Hyundai E&C, Daelim  
Source: Bain&Co. analysis; companies annual reports and presentations; expert interviews

# Way forward

## Korean players may have now learned their lesson...



"We believe the E&Cs have **learned their lesson** as is becoming more **rational on pricing and operation**, to be more prudent in order intake, diversifying risks, stronger internal controls and **focusing on profits rather than volume.**"

*UBS, January and July 2014*

"The top management at Daelim states the new incoming orders are better margin as Korean E&Cs are no longer as aggressively bidding as before: there are **increase instance of Korean E&Cs forming consortium to bid for projects, thereby lowering competition among themselves.**"

*UBS, January 2014*

"Many Korean construction companies have **started to expand to non-Middle East regions, especially South America and CIS**, in the hope of diversifying regions and businesses."

*Deutsche Bank, May 2014*

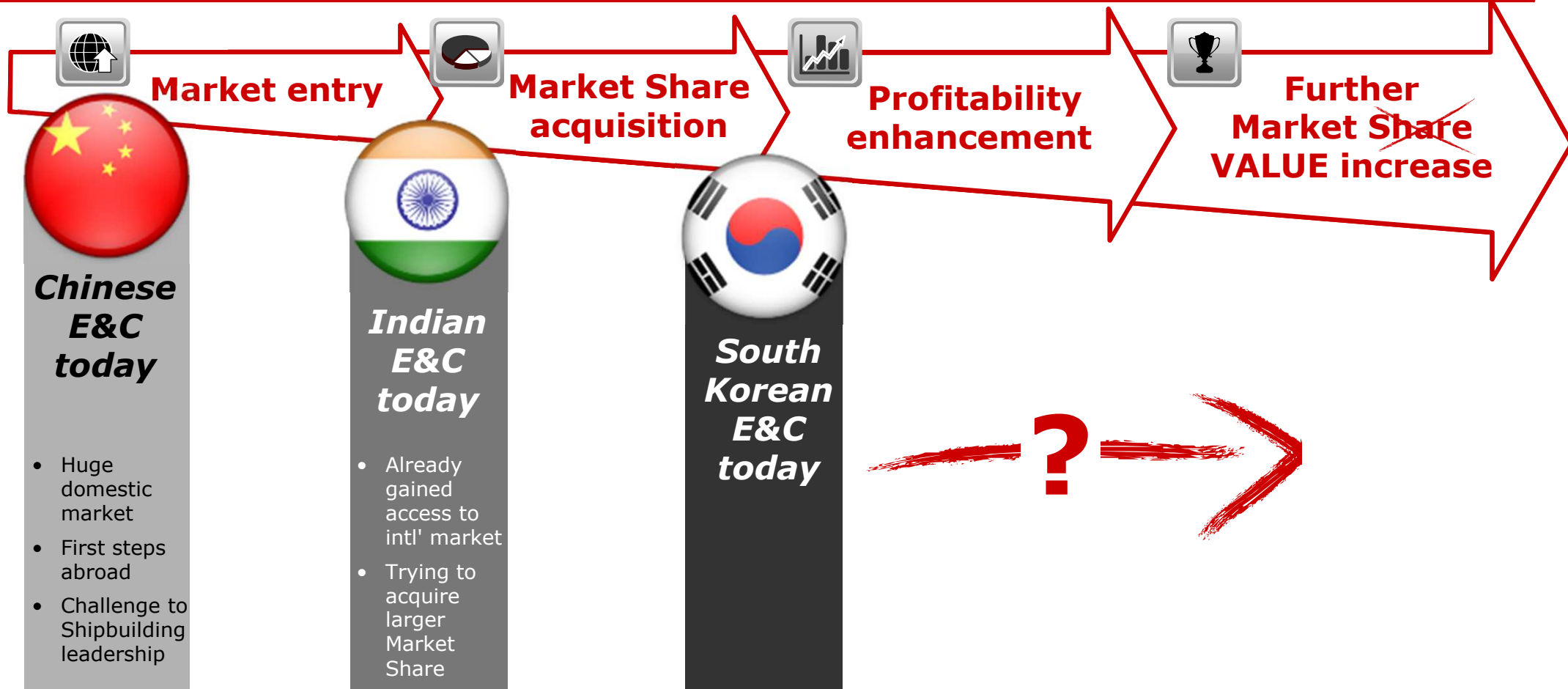
"All South Korean E&C players failed in bids for **Malaysia refinery and petrochemical** integrated development (RAPID) project packages: **Sinopec Engineering won** the USD1.3b package 2 for the project."

*Samsung Securities, August 2014*





... while **new Value Chains** are emerging...



**Is the South Korean Value Chain replicating the growth model experienced in other markets (e.g. automotive, ...)?**



# Chinese E&C Contractors speak a different language



用以投资的中国资本



中国投资者的决定



# Chinese E&C Contractors speak a different language



Chinese money

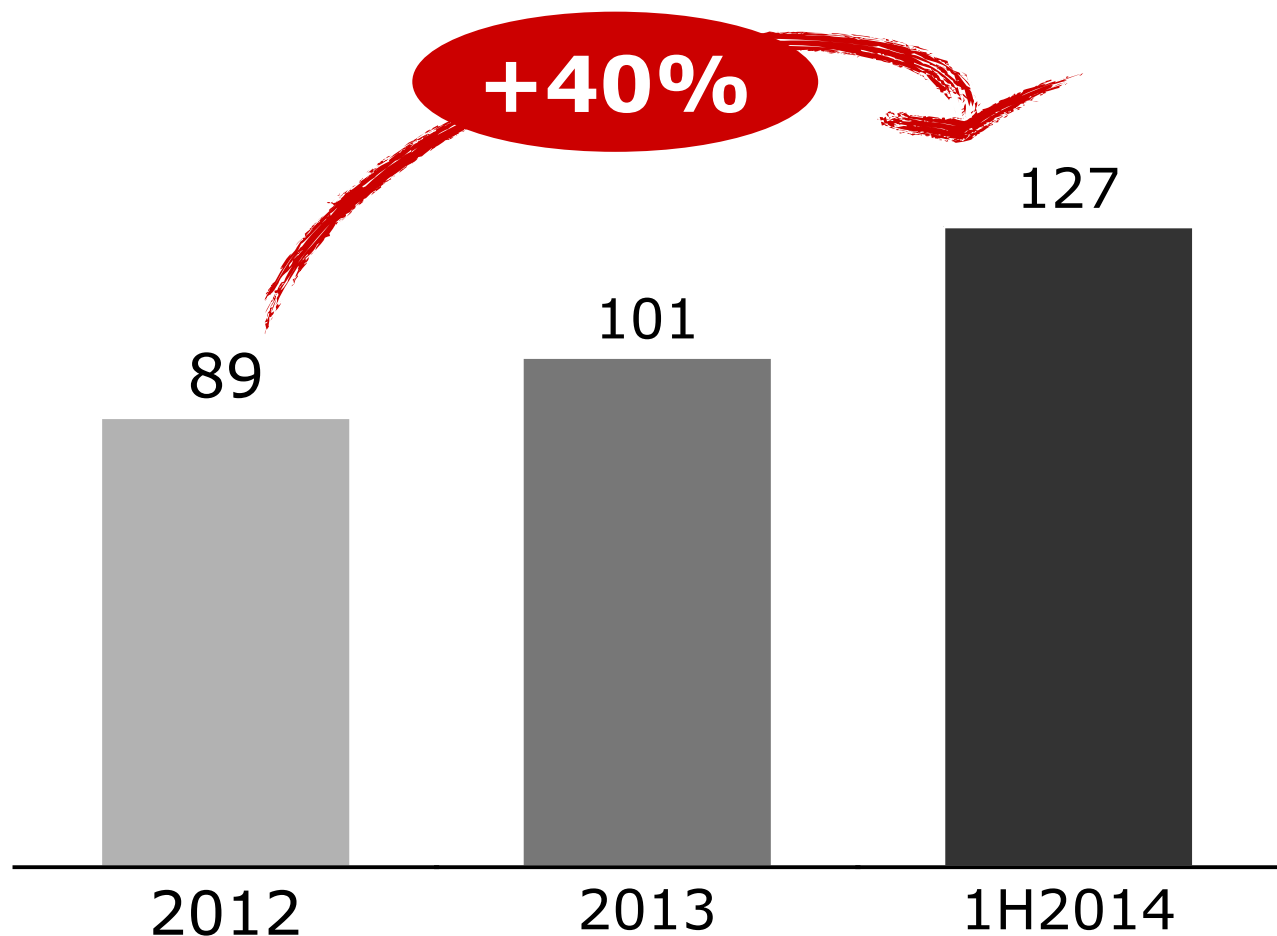


Chinese decisions



# Western E&C players have been able to "follow the money"

## Backlog of 8 main Western Engineering & Contracting Oil&Gas players, Billion EUR



- ~2,2 years of activity
- Additional workload equals the size of 1 large player

Companies considered: Saipem, Technip, Fluor, CB&I, Foster Wheeler, Técnicas Reunidas, Maire Tecnimont, Air Liquide E&C  
Source: company presentation to analysts

# What is next for our Value chain?



- Short term:  
**Delivery consistency**
- Mid Term:  
**Competitiveness with innovation, size, cooperation**



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