IPHA Annual Conference 2016

Surviving in a market going from extreme boom to collapse to normality

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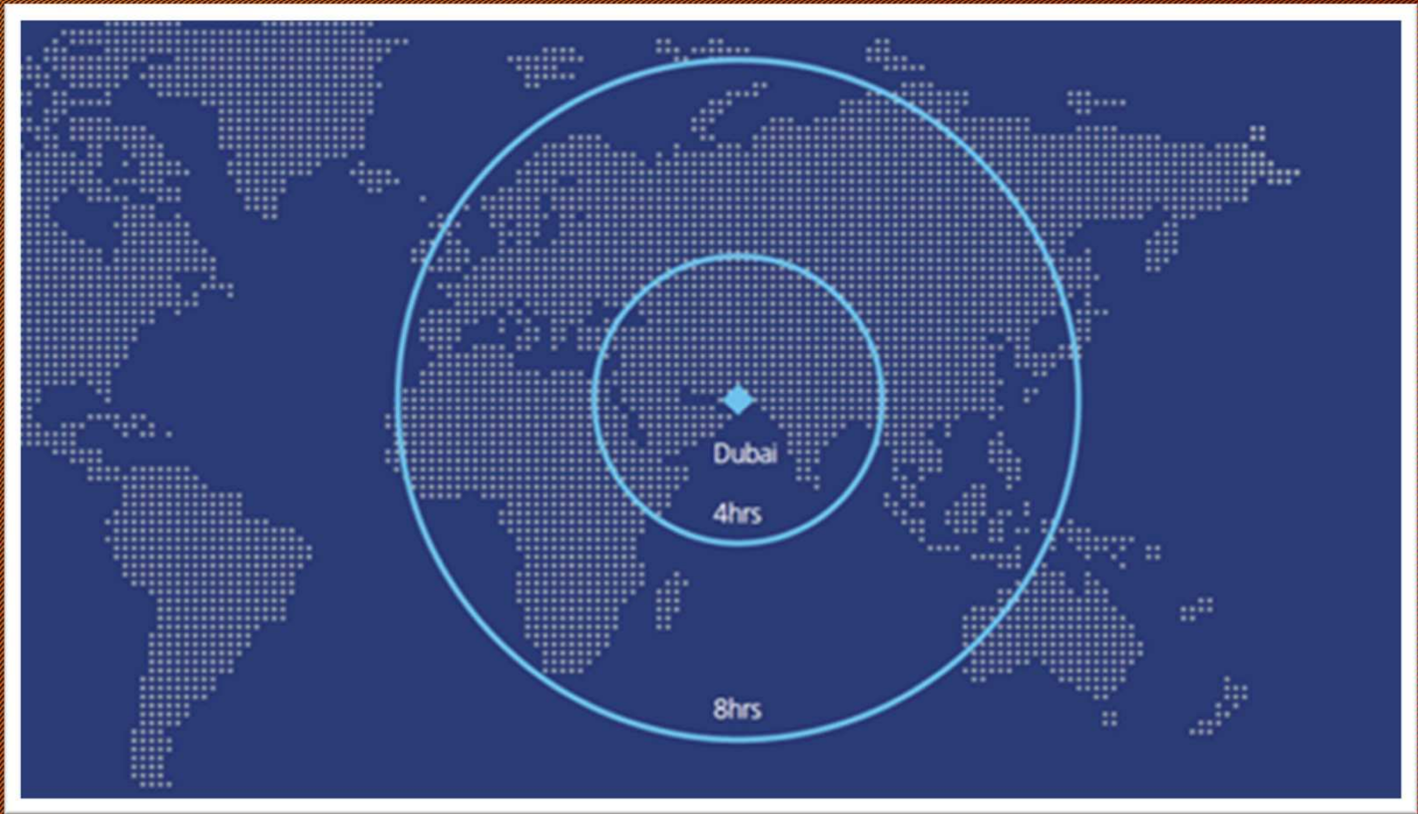
United Precast Concrete UAE

Where in the world?



Within a flight radius of 8 hours there are 9 of the world's top 20 countries in terms of population, representing roughly 75% of the world's population!

United Arab Emirates

Size and scale

Population: Circa 9 million
Area: 83 600 sq. km.
GDP: Approximately $450 Billion

Over 30 precast companies
Combined daily capacities:
HCS: 40,000m^2
Tilt: 7000m^3
Largest 14 companies make up 90% of the capacity

Boom time (2006-2009)

- The UAE Boom
- Capacity vs. Orders
- Production levels
- Manpower
- Material base rates
- Operational results

Dubai Marina 2003

Dubai Marina now

Sheik Zayed Road circa 1970

Sheik Zayed Road Now

Tower Cladding Panels

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Villa complexes

Hotel Staff Accommodation

Residential Apartments

Worker Accommodation

Carparks

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Production levels

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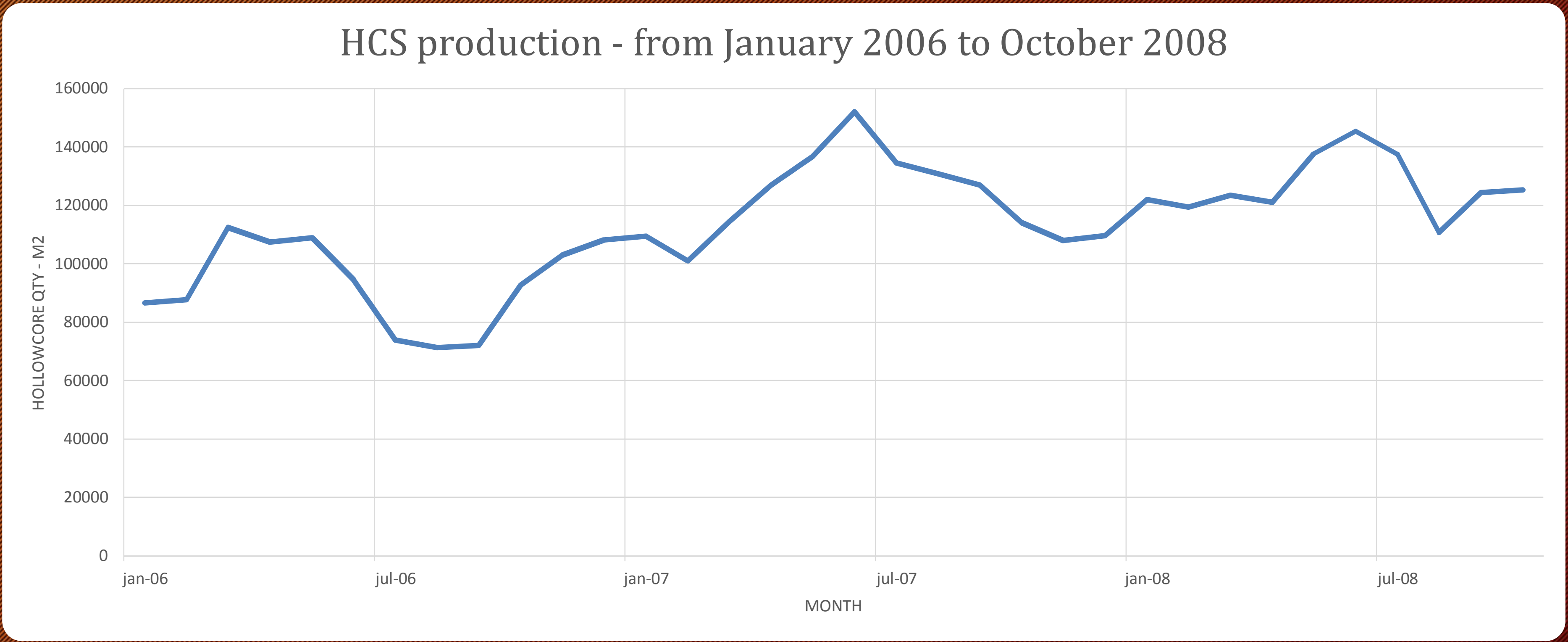
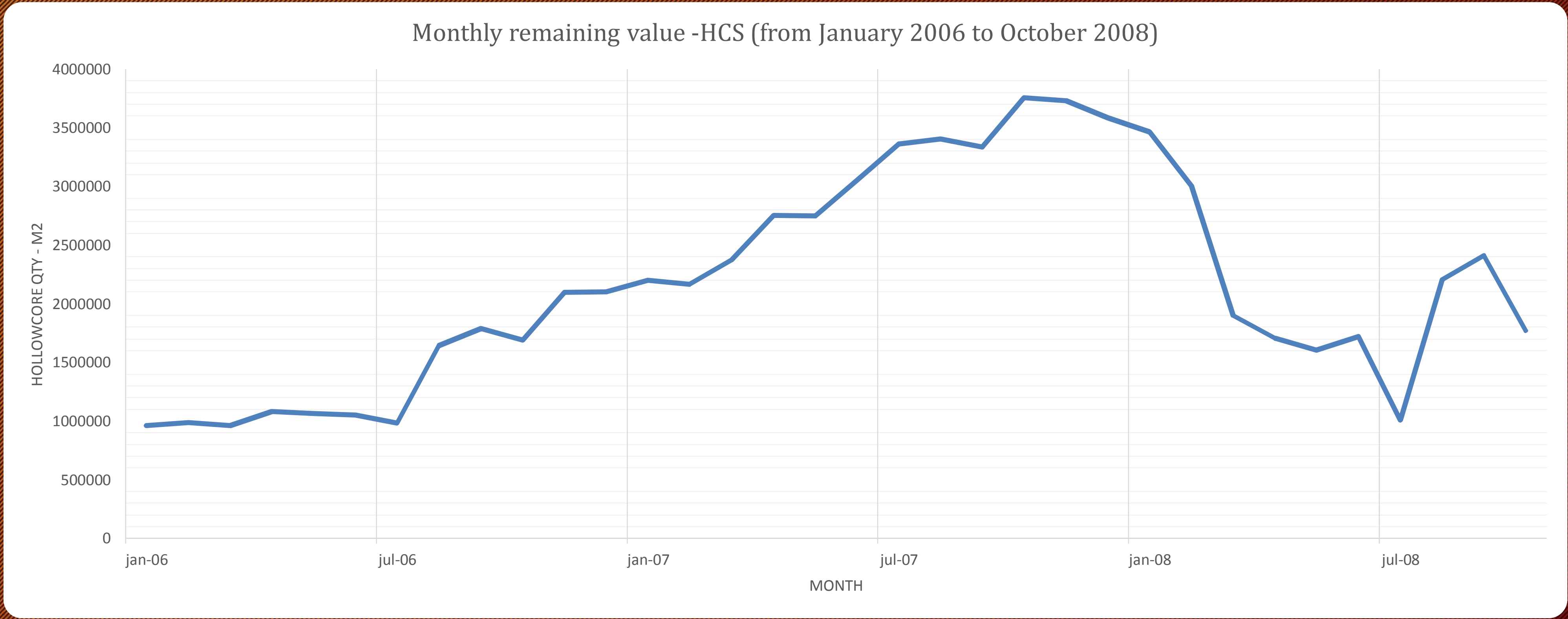


Order book



Monthly remaining value -HCS (from January 2006 to October 2008)
HOLLOWCORE QTY - M2
4000000
3500000
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MONTH

Manpower

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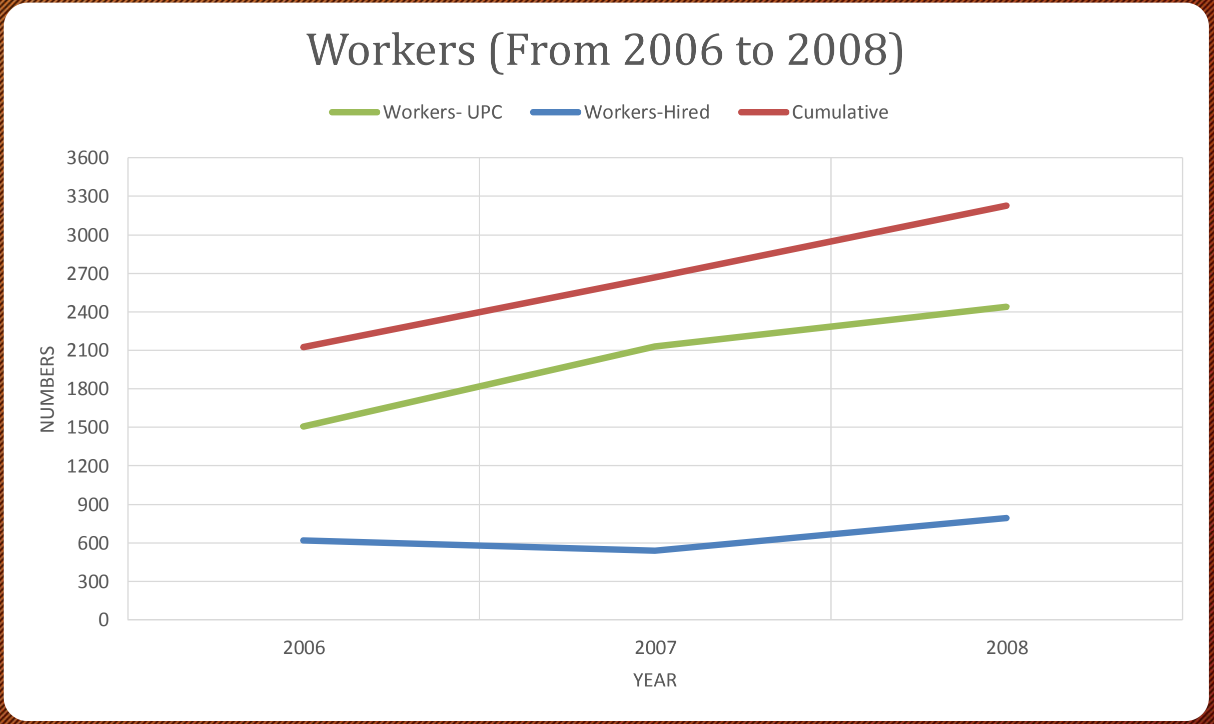
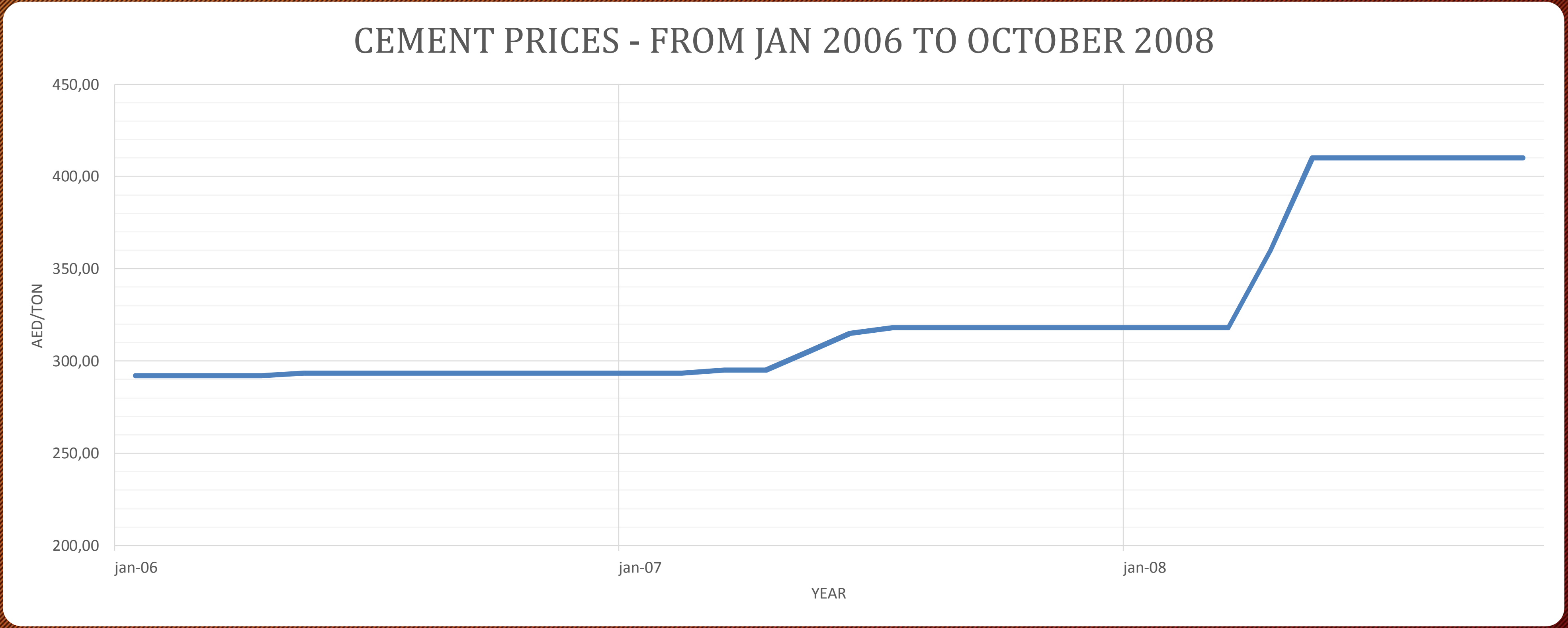
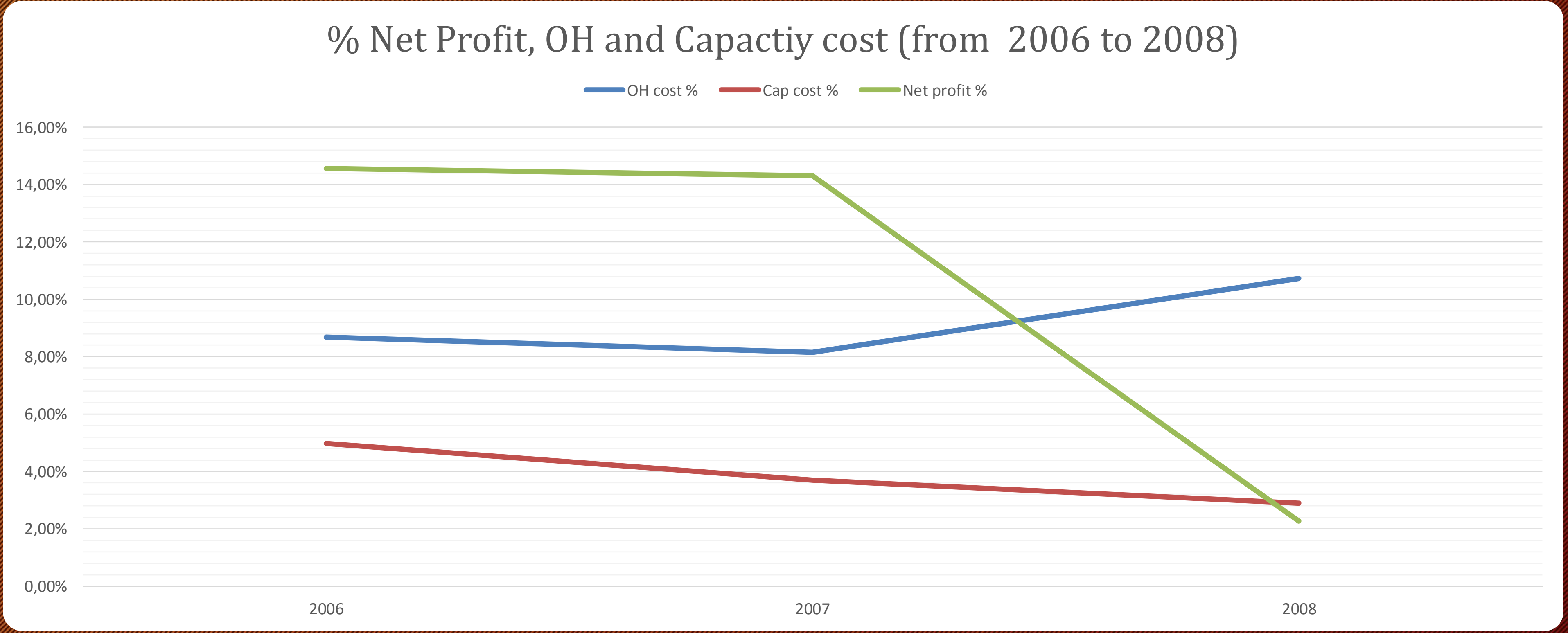


Material base rates



Operational results



Collapse (2009-2012)

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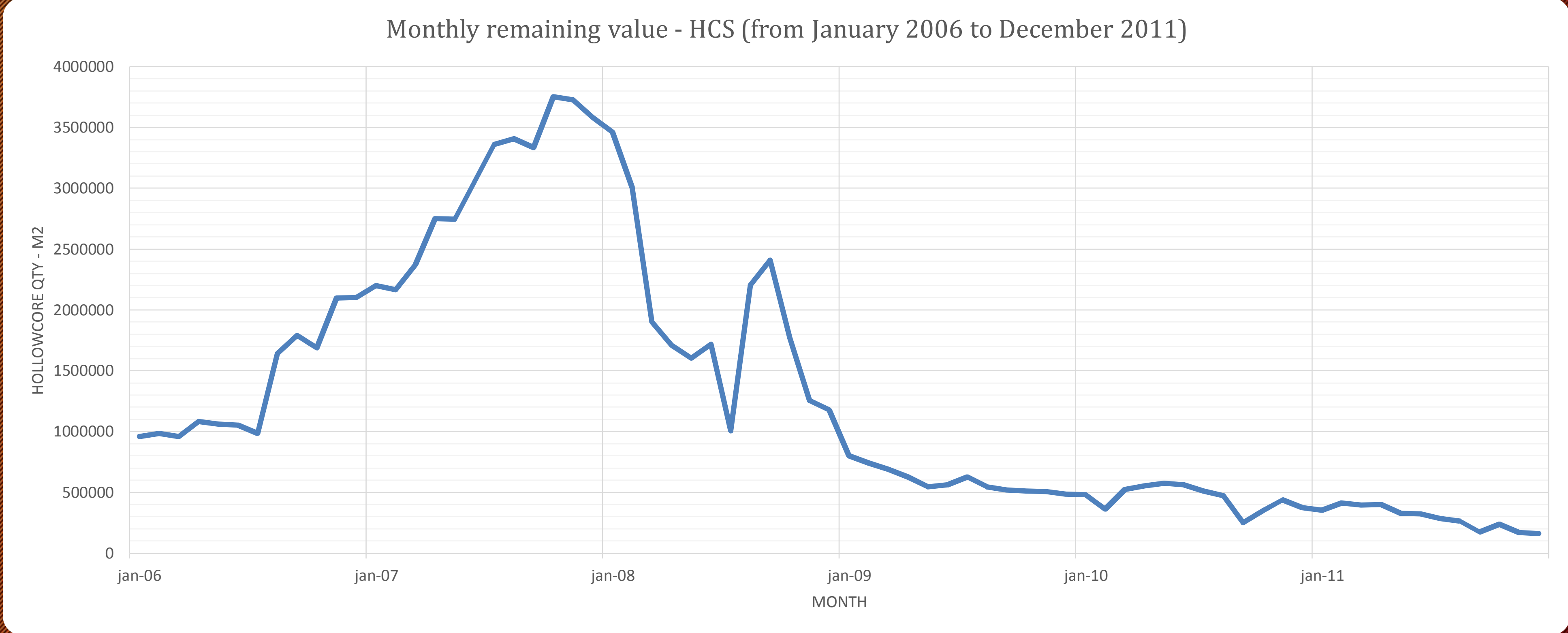
- Capacity vs. Orders
- Manpower
- Material base rates
- Fallout
- Proactive and reactive
  - Cost control
  - Legal lessons
  - Continuous improvement

Order book



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MONTH

Scenario plans: Dec 2008

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4 main scenarios namely:

- Holding pattern
- One factory
- Current level
- All factory

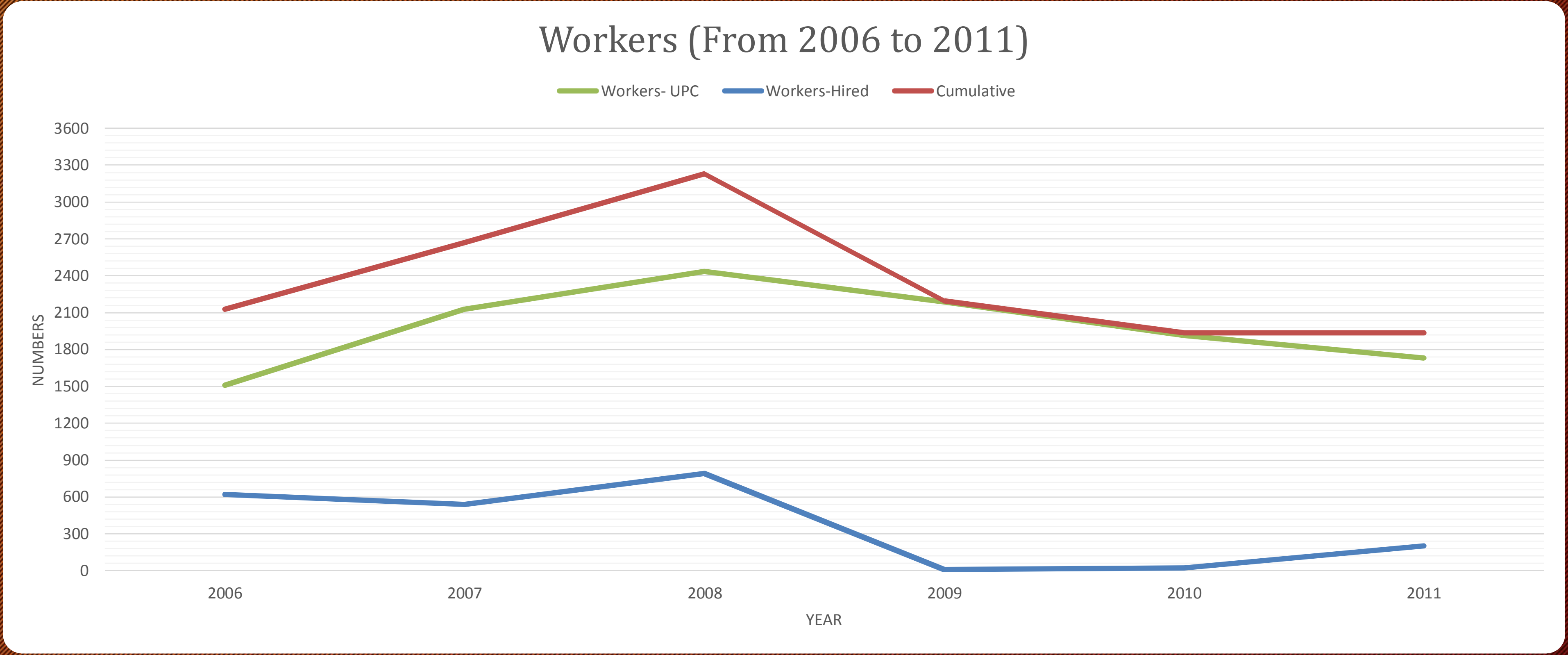
Production Capacities (Daily)

	DXB	AUH	DIC	Total
HCS (m2)	2900	1300	3975	8175
TILT (m3)	200	180	250	630
TILT (pcs)	130	160	180	470

Current load 2009

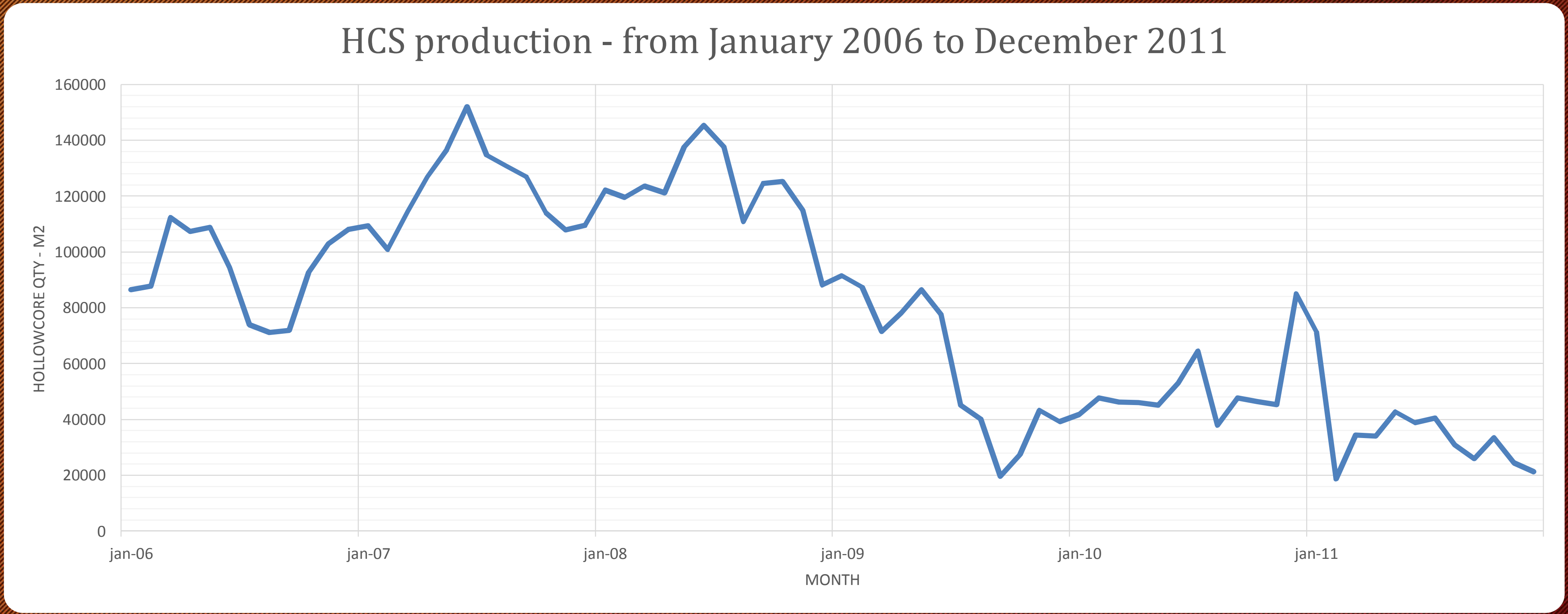
	Q1	Q2	Q3	Q4
HCS (m2)	4200	1500	0	0
TILT (m3)	500	300	0	0
TILT (pcs)	320	200	0	0

Manpower


Workers (From 2006 to 2011)
Workers- UPC
Workers-Hired
Cumulative
NUMBERS
3600
3300
3000
2700
2400
2100
1800
1500
1200
900
600
300
0
2006
2007
2008
2009
2010
2011
YEAR

Material Base Rates

Production levels



Legal claims

- Non – payment/ spurious claims of delay
- Contractual notification of default/dispute
- Arbitration/local courts
- Ongoing pursuit of debt

Lessons learnt

- Key areas we noted and improved on were
- How we price; quote and conclude contracts with respect to:
  - Scope of work
  - Form of contract
  - Bond Formats
  - Programs
  - Payment Terms
  - Dispute Clauses
- Accurate record keeping of project phase including:
  - as built programs
  - daily activity reports
  - Photos
  - Client scope progress
- Prompt contractual correspondences regarding delay; variations; etc.
- Specifications to be clear.

Operational efficiency

- Exposed process inefficiencies
- Excess stock
- Continuous improvement process
- e.g. HCS stock age

HCS Stock age levels

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Lean Initiative 1 HCS Stock Level/Age - 5 Why Analysis

	Why there is slabs in stockyard beyond 10 days				Why there is stock slab/no date stock?		
Why	Why there is aged stock?	Why there is aged stock?	Why there is aged stock?	Why there is aged stock?	Boundry walls - Why there is stock?	Roofing/Flooring Slabs - Why there is stock?	Why do we cast extra slabs not needed for a project? (MPs Work)
	Produced but not delivered because no progress payment received	Produced as per design request, but later informed change in design	Age report not updated	Produced slabs as per request	Produced to fill the bed expecting to be used	Some of the slabs are reworked units	We need to fill beds
Why	Why produced before payment received?	Why there was change in design?	Why this is not updated?	Why this is not used?	Why produced expecting to be used?	Why there was rework?	Why do we need to fill the beds if the slab is not needed.
	Produced to keep as safe stock	Change in client requirements	There are follow up procedures	Erection site is not ready	To use in future projects	Slabs developed cracks and defects	To prevent strand wastage
Why	Why we need safe stock?	Why this was not communicated?	Why there is follow up procedures?	Why there was an early request to produce before site ready?	Why this is not utilised?	Why slabs developed defects?	Why would the strands be wasted?
	Client can pay anytime and can ask for next delivery	Already produced when communication was received.	Inorder to update approval is needed	Poor Coordination with Client/Contractor	It doesn not match with new design specifications/client requirements	Handling problems including overstacking, collisions and also quality check failures	Beacause they are cut to length
Why	Why this is permitted?	Why produced without communication?	Why is it not approved?		Why this is not matching specifications and requirements?	Why there is overstacking, collisions and QC failures?	Why they are cut to length?
	Responsible persons are not acting timely	Produced as per schedule	Someone is responsible for something and is not done		Product was sold by sales team with different specification	Overstacking: Lack of space, Procedure not followed Collisions: Human Errors while transport Slippage: Compaction: Equipment Failure	The coils cannot be stocked at the stressing end.
Why	Why no timely action?	Why schedule was not updated?	Why there is no responsibility?			Why this is not prevented?	why it cannot be stocked?
	Project strategy plan clashes/contrasts with project scedule	Poor Coordination with Client/Contractor	Red Notes are not followed			Not following benchmarks/ standard operational procedure	There is a lack of space

n2)
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.02
.02
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.64
.10
.99
.01
.18

Productivity benchmarking

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HCS MONTHLY REPORT

BENCHMARK

FACTORY

DUBAI

MENU

MONTH : February/2016

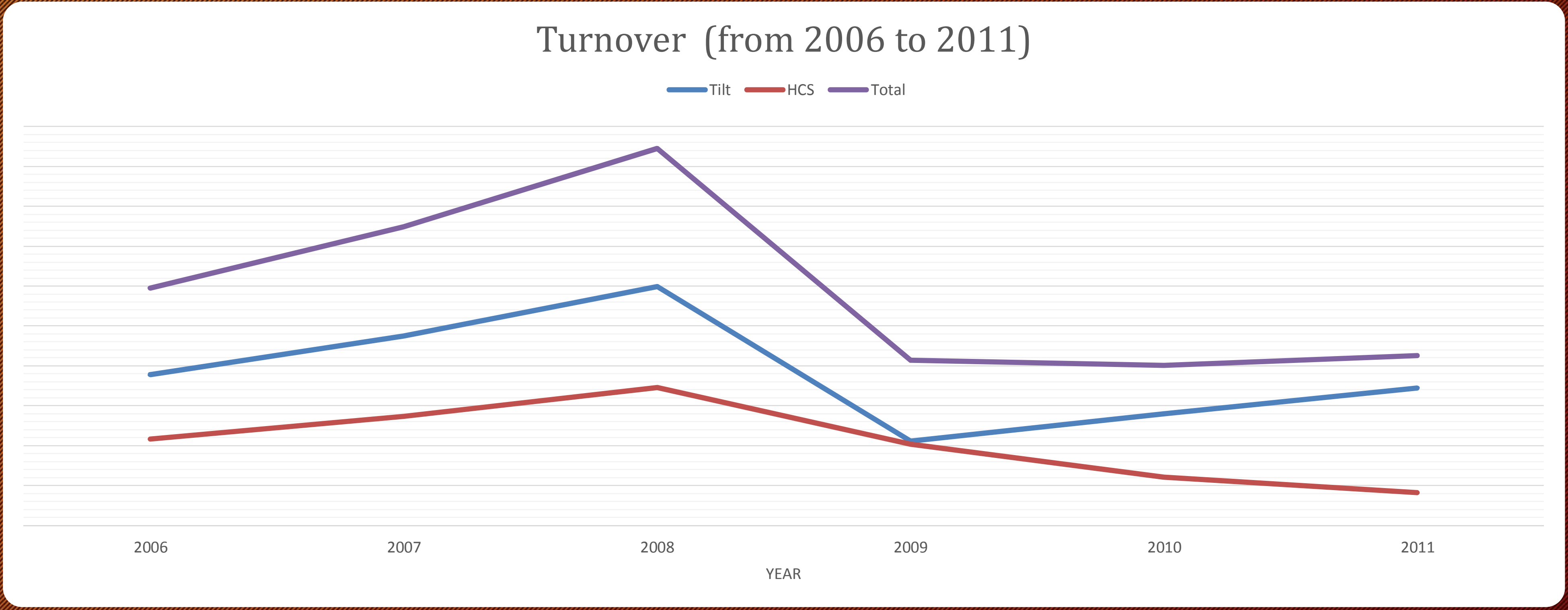
	Thickness >>>	Unite	150	200	240	265	320	400	500	Total
AREA	Gross area produced (LxW)	m^2								
	Net area Produced	m^2								
	Total waste	m^2								
		%								
	Unavoidable waste	m^2								
		%								
	Rejected on bed	m^2								
		%								
	Design waste	m^2								
		%								
CONCRETE VOLUME	Allowable Theoretical Volume.	m^3								
	Actual conc. Volume	m^3								
	Total Concrete waste	m^3								
		%								
	Concrete due to bulkiness	m^3								
		%								
	Concrete used for corefill.	m^3								
		%								
	Concrete waste due to Machine break down	m^3								
		%								

STRANDS	Allowable Theoretical Weight.	ton
	Actual consumed weight	ton
	Total strand waste	ton
		%
	Unavoidable waste	ton
		%
	Design waste	ton
		%
	Due to rejected	ton
		%
	Due to optimising	ton
		%
MAN HOURS	Man hours used	hrs
	Man hours / gross area produced	hrs/m^2
	Man hours / Nett area produced	hrs/m^2
	Man hours / Gross volume produced	hrs/m^3

Description	
HCS	m^2

STOCK	Month Beginning	m^2
	Month End	m^2

Operational results



Normality (2012-2016)?

- Continued market situation
  - Legal cases and costs
  - Shifting markets and mini boom
  - Oil price
  - Overcapacity market
- Trends for the period
  - Production levels
  - Order book
  - Manpower
  - Material base rates
  - Operational result
- Strategic focus

Production levels

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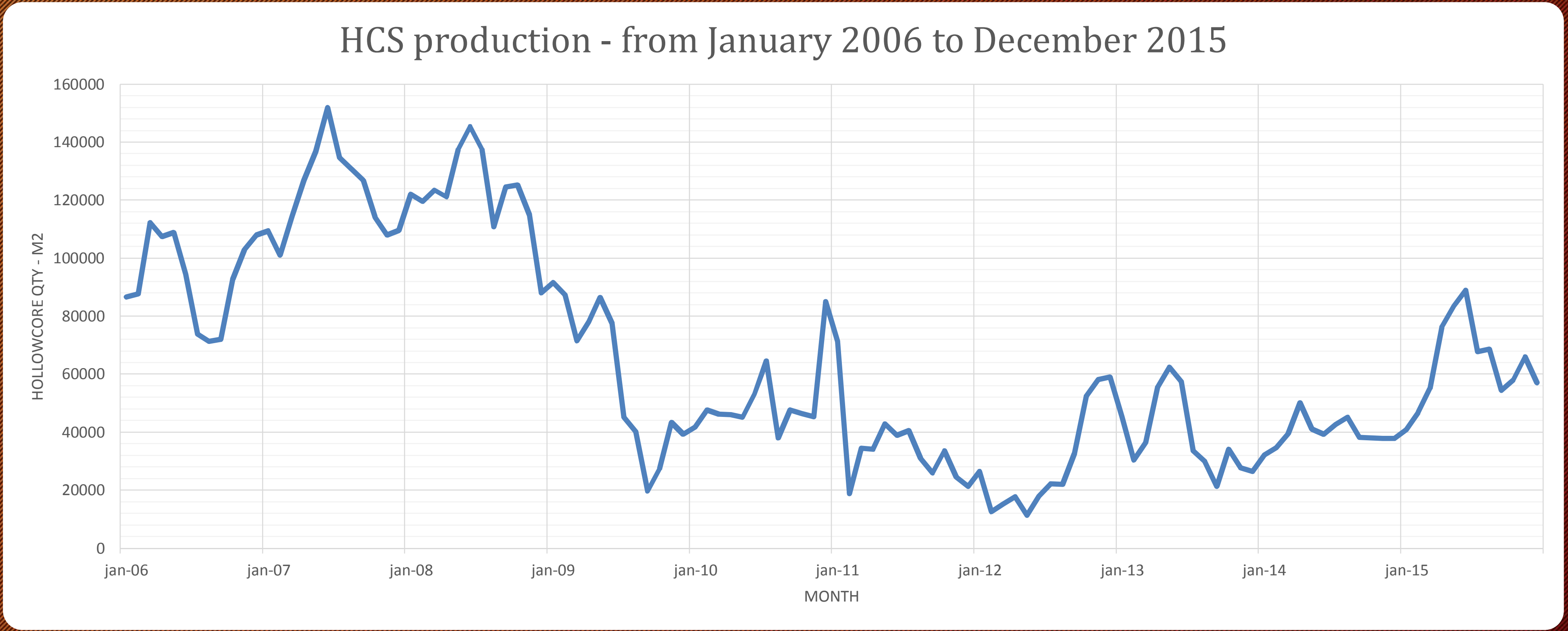
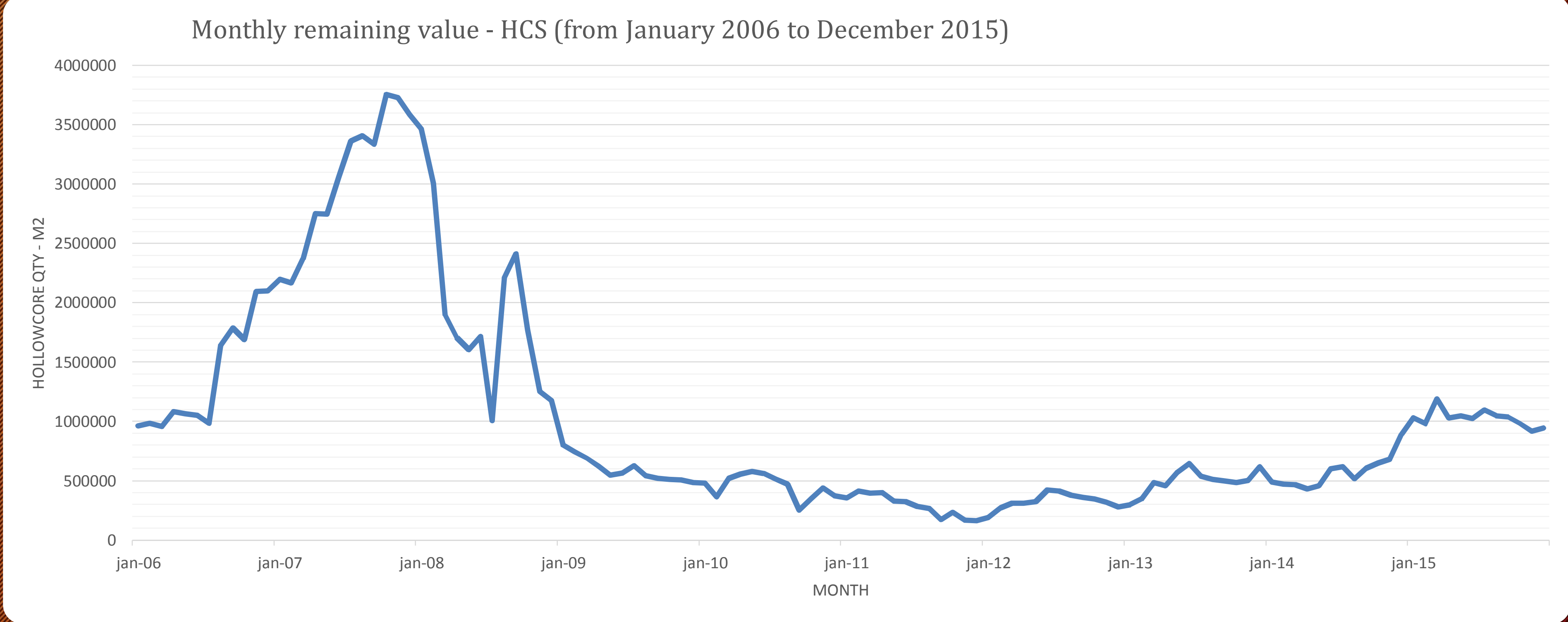


Order book



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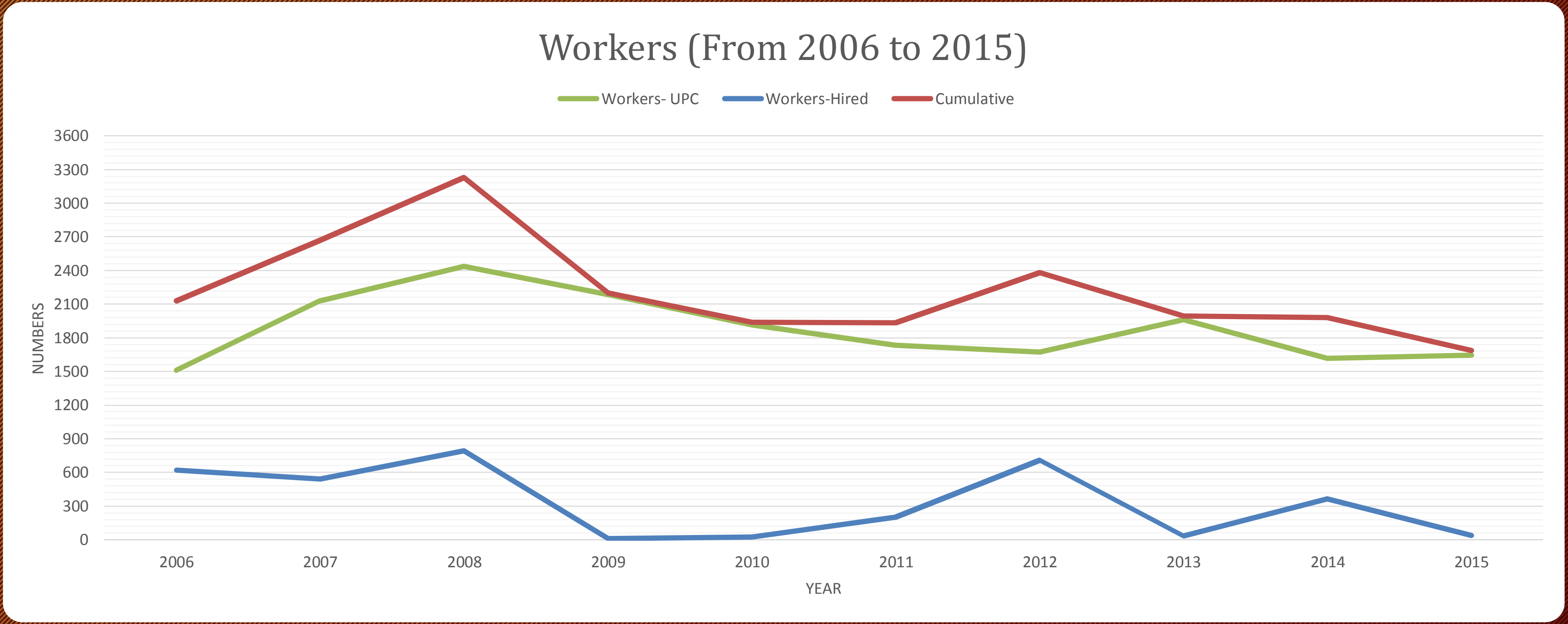
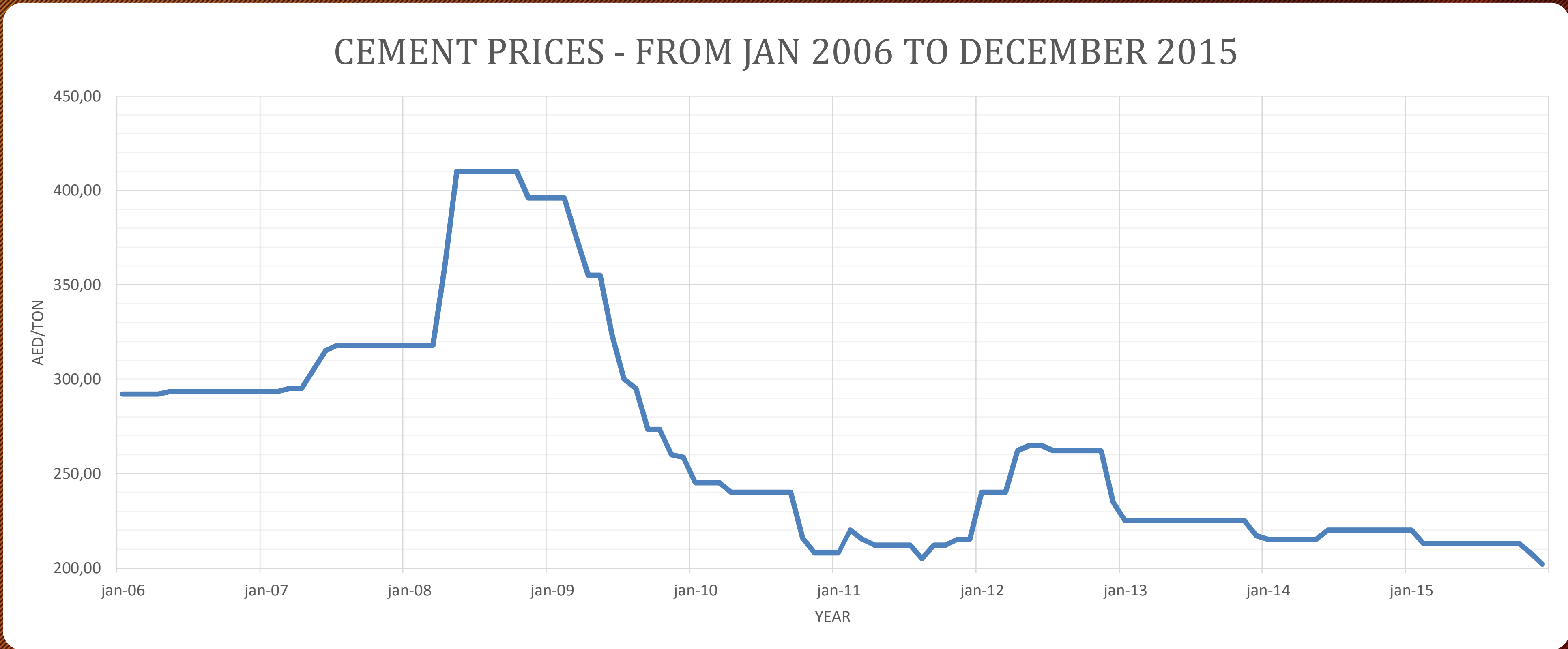


Material Base Rates



Operational Results

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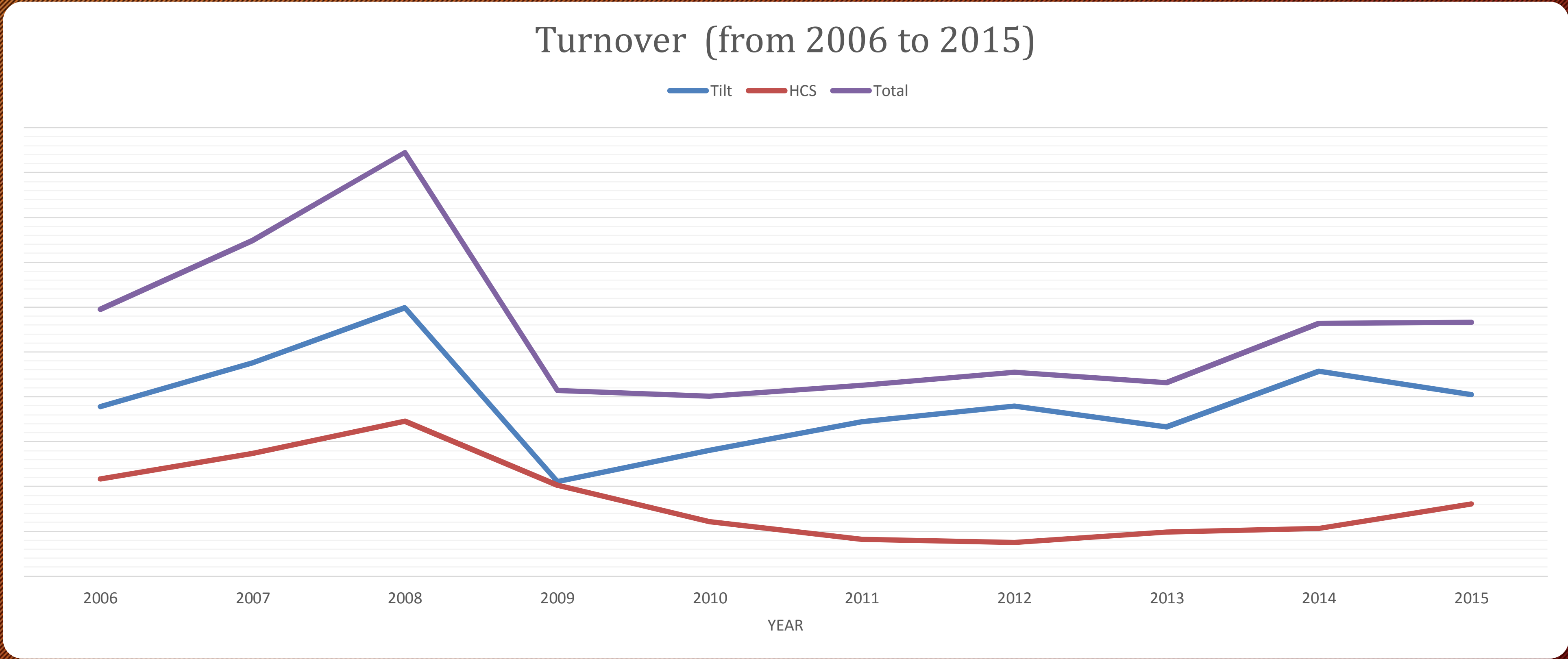

Strategy going forward

- Continue to develop and apply lessons learnt from the crash
- Approach market growth with caution
- Bi-annual management strategy meetings
  - Revisit previous strategy/focus points and adjust
  - Incorporate key focus areas for improvement
  - Current focus:
    - Non conformance reporting and correction
    - Benchmark deviation
    - Cost reporting and control
    - Market feedback
- Action points monitored and reported on in regular management abd department meetings
- Ongoing focus on cost control and efficiencies = 10% improvement in gross margin in last 2 years

Thank you