Asset Valuation Seminar

12th of June 2018

RITCHIE BROS. Auctioneers | IRON PLANET | MASCUS | Marketplace An IronPlanet solution

Agenda

12:45 - **Welcome with sandwich lunch**

13:30 - **Asset risk management, the impact of asset valuation on Equity**
by Jean-Paul van Grinsven (ING Lease)

14:15 - **Circular leasing proposition, the lease of pre-used assets** (do's & dont's)
by Frits Engelaer (DLL Group)

15:00 - **Break**

15:30 **- Introduction Ritchie Bros.**
by Christian Sonneville (Ritchie Bros.)

15:45 - **Asset Valuation tools for Portfolio & Asset management**
by Rickard Krøtø and Johan Lustig (Mascus International)

17:00 - **Q&A and closure**

17:30 - **Drinks & snacks offered by Ritchie Bros.** (until 18:45)

RITCHIE BROS.

Approaching asset valuation

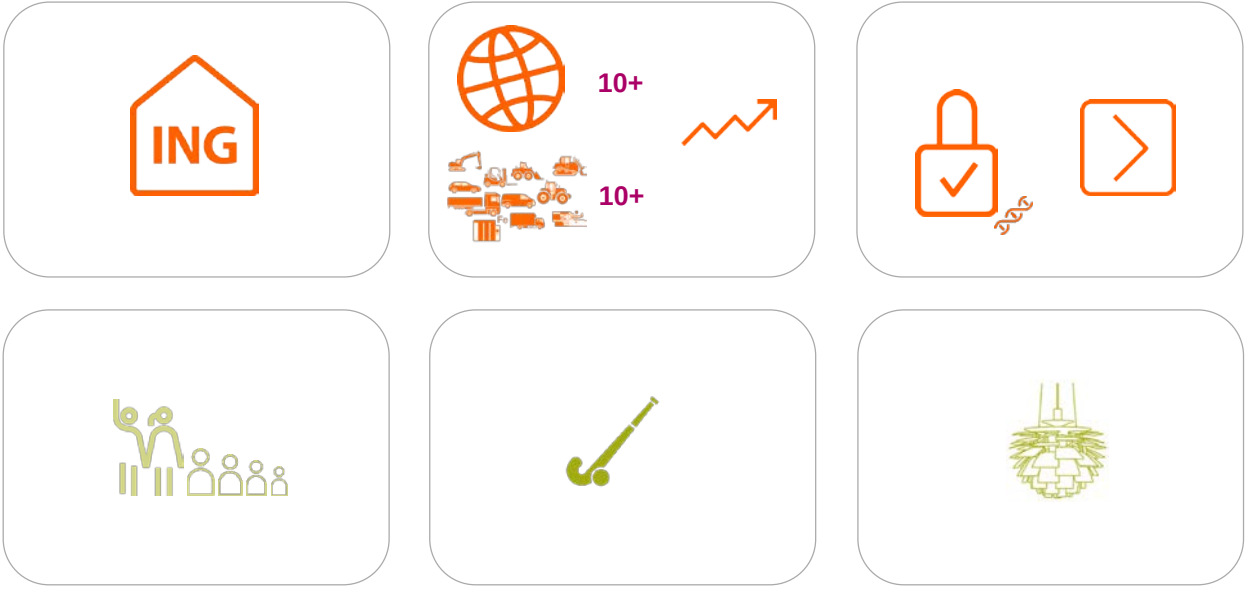
And impact on equity

Jean-Paul van Grinsven

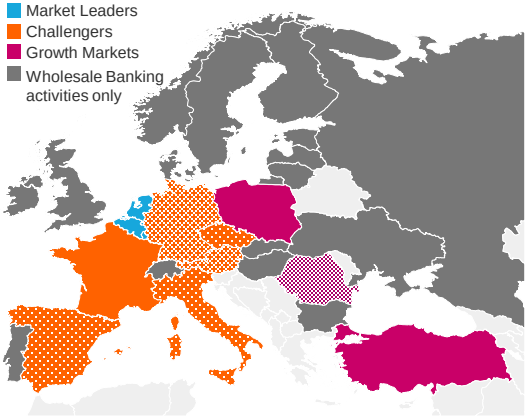
NVL – BLA seminar, Zevenbergen 12-6-2018

ING

About me



About leasing within ING



Aligned with ING's footprint

Offering		BE	FR	LU	NL	PL	TR
Asset	Wheels	✓	✓	✓	✓	✓	✓
	Equipment	✓	✓	✓	✓	✓	✓
	ICT	✓	✓	✓	✓	✓	✓
	Real estate	✓				✓	✓
Tickets	Small	✓		✓	✓	✓	
	Mid	✓	✓	✓	✓	✓	✓
	Big	✓	✓		✓	✓	✓
Segment	Corp	✓	✓	✓	✓	✓	✓
	MidCorp	✓		✓	✓	✓	✓
	SME / Prof	✓		✓	✓	✓	

Country offering

Trends & regulations impacting the industry

Overall trends

- **Circular economy**, circular supply chain
- Bundled services, **pay-per-use**
- Customer journeys within ecosystems
- **Customer experience** is differentiator
- New models fuelled by **fintechs**

Regulations

- **Accounting Rules**
  - IFRS 16 Lease accounting
  - IFRS 9 Provisioning
- **Basel regulations**
  - Basel 3.5 / 4
  - Stricter model approach
- **GDPR**
- **AMLD 4**
- **Cybersecurity**

Asset based = lower risk = higher returns

Capital

Standardised ✗

Foundation ≈

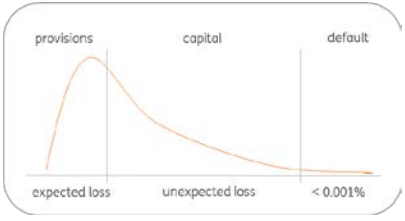
Advanced ✓

Provisions

Local GAAP ? ✗

IFRS 9 ✓

Provisions vs. capital



But assets are just one of the drivers for return

Standardised ✗

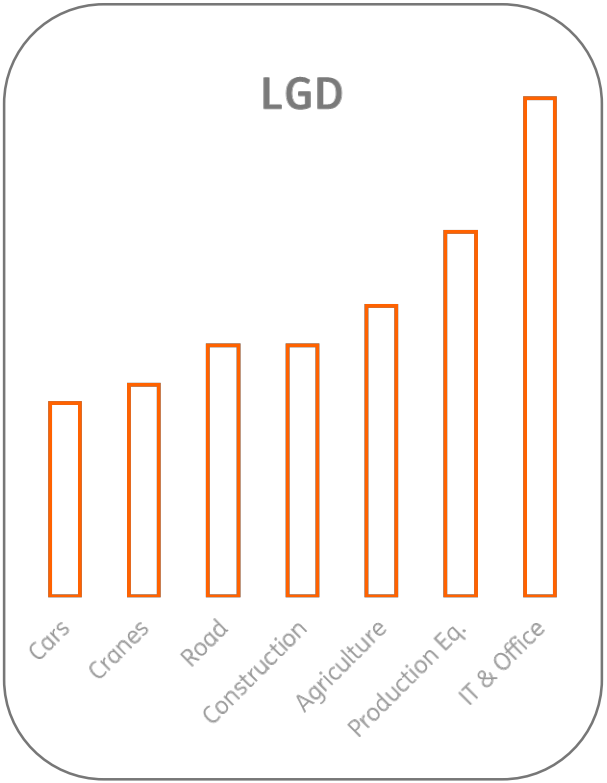
Foundation ≈

Advanced ✓

PD | EAD | RV | LGD | M | Size

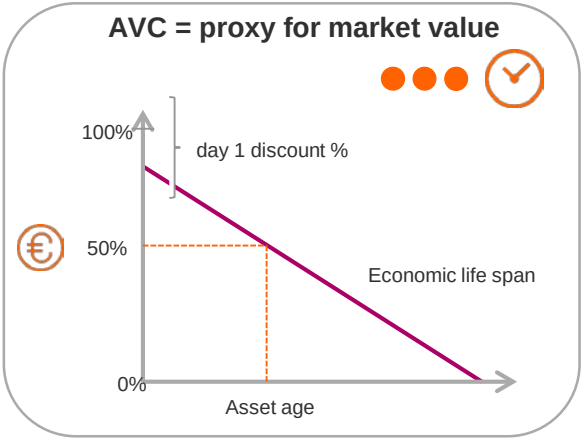
Funding cost | Operating cost

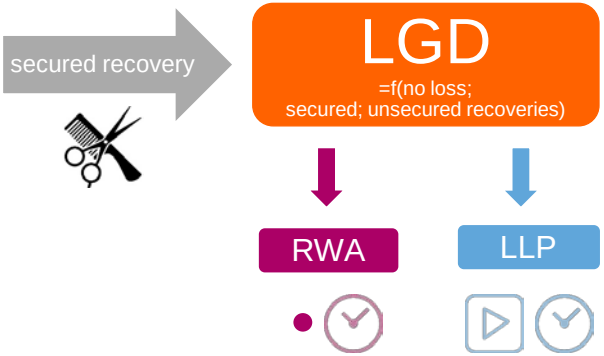
Customer pricing

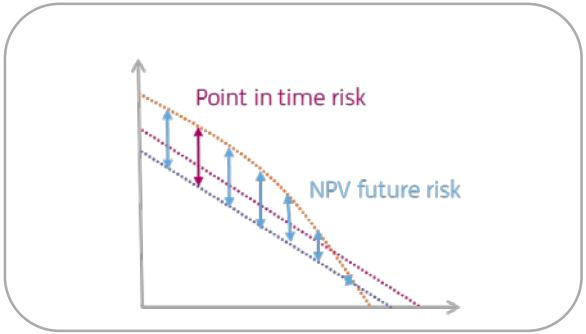


Our regulatory approach to asset valuation

Asset valuation curves & financial impact







≈ 100 different assets
≈ 20 different AVCs
reviewed annually

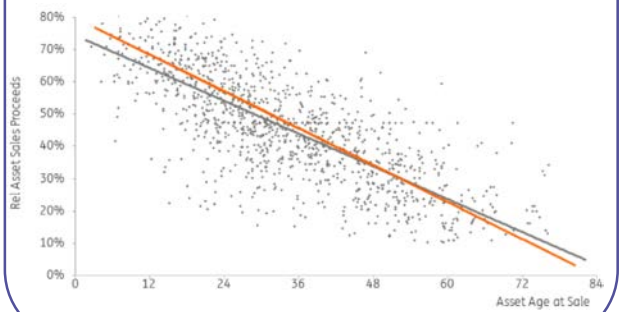
<<>>

Establishing AVCs

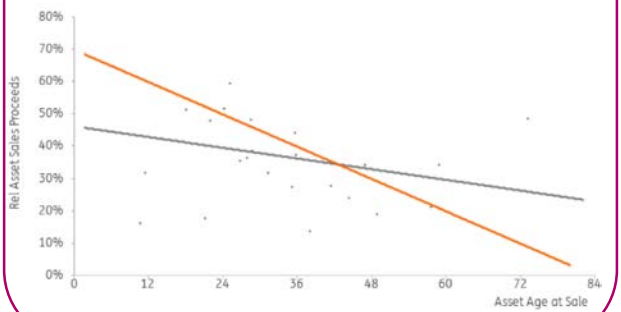
ECB – Targeted Review of Internal Models
- Increasing interest in asset valuation approach
- Increasing strictness in interpretation of regulations

External auditor: IFRS-9 scrutiny
- Models may not under estimate but also not over estimate
- And must reflect current macro economic outlook

Asset group x



Asset group y

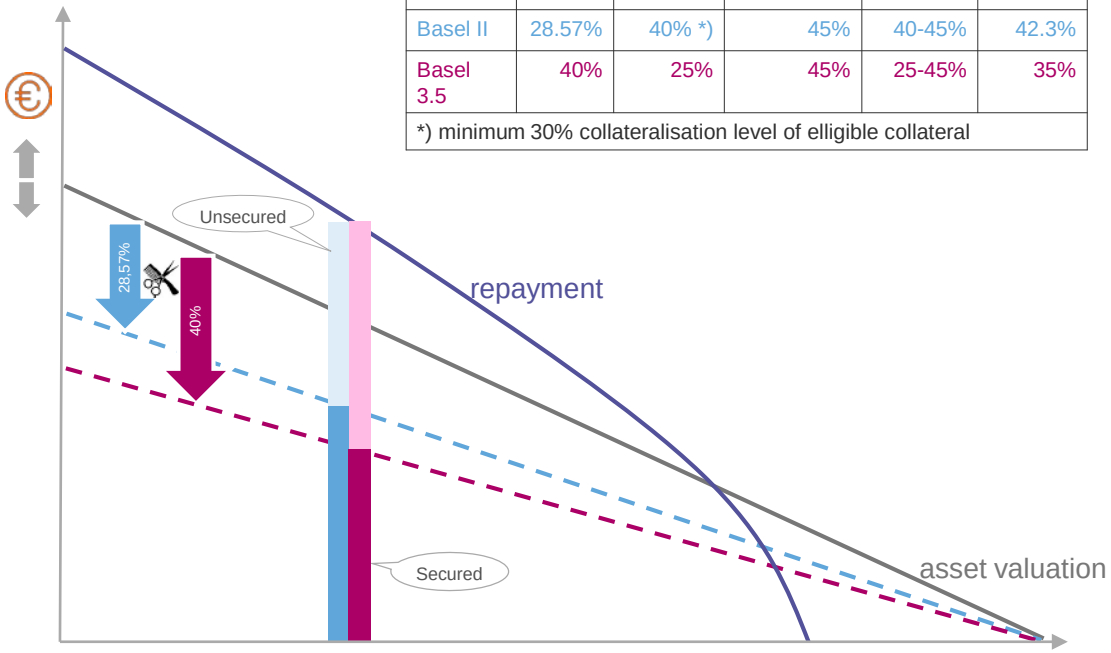


- Bad recoveries dominate internal data
- Data quality: outliers, reliability
- Volatility: 90% of all cases realizing >70%?

- How prove liquid markets?
- How to substantiate expert view?
- Granularity okay for regulatory <> business

Eligible market values are of increasing relevance

F-IRB	haircut	Secured LGD	Unsecured LGD	Range LGD	Example
Basel II	28.57%	40% *)	45%	40-45%	42.3%
Basel 3.5	40%	25%	45%	25-45%	35%
*) minimum 30% collateralisation level of elligible collateral					



Ideas to improve our asset valuation approach

ING

- Establish clear cover valuation policy for communication with regulators
- Harmonise our operating models to increase data reliability
- Have a more liberal underwriting approach to increase number of defaults…

- Establish industry approach towards regulators on asset valuation
- Share our data at an industry platform to increase statistical / regulatory value
- Team-up with external parties to purchase and share data

- Lobby for sufficiently granular capital approach for leasing under SA / FIRB
- Establish a single, liquid and transparent market place for asset sales across Benelux?

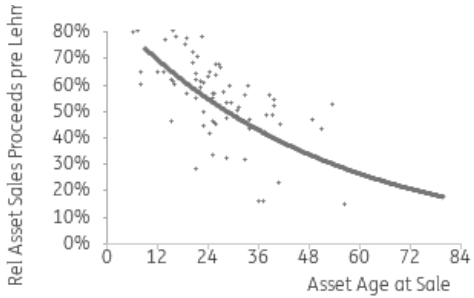
ING

Thank you

ING

Limited volatility throughout the cycle

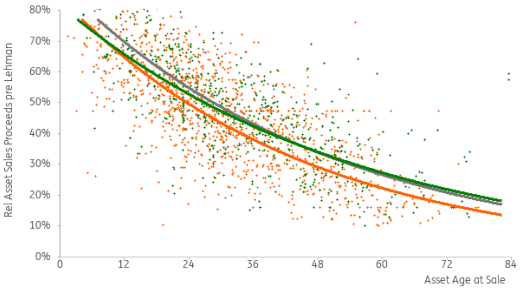
Pre-Lehman – limited data, learning collection



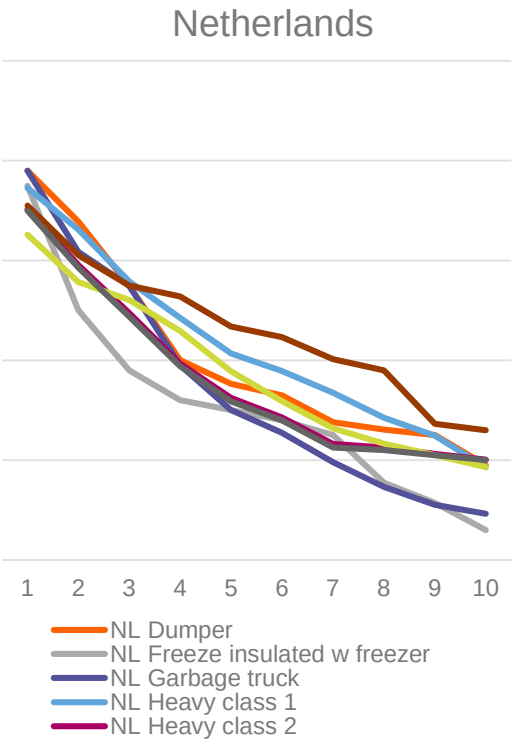
Post-Lehman (until 2014) – many data points

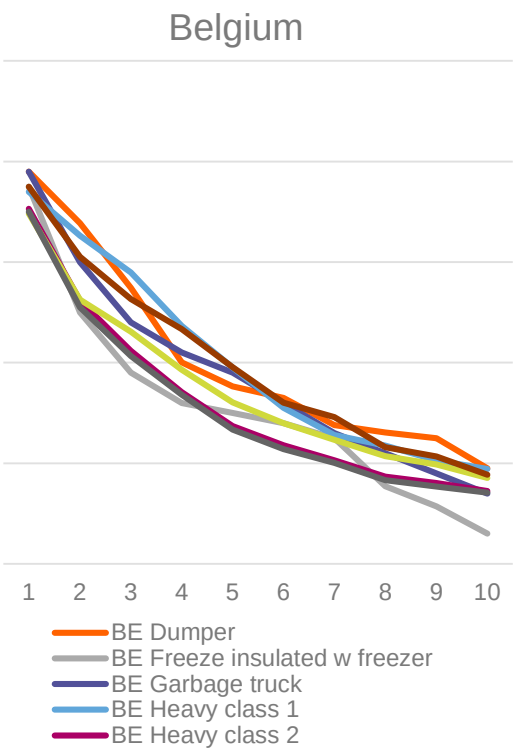
Recent years – normal cycle, mature collection

Throughout the cycle



Greater granularity, in assets and countries

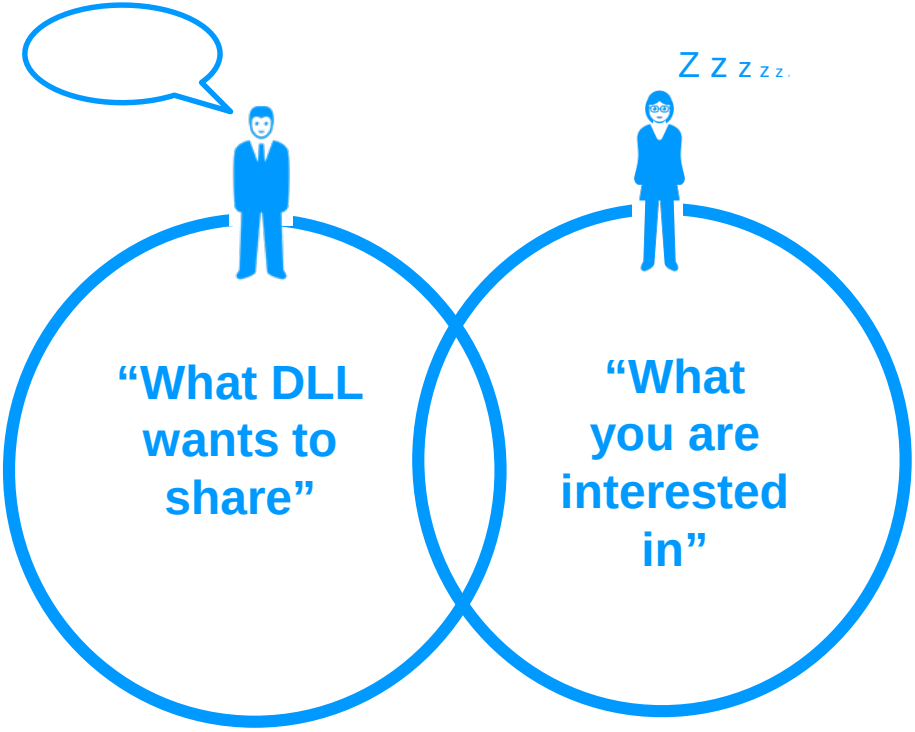




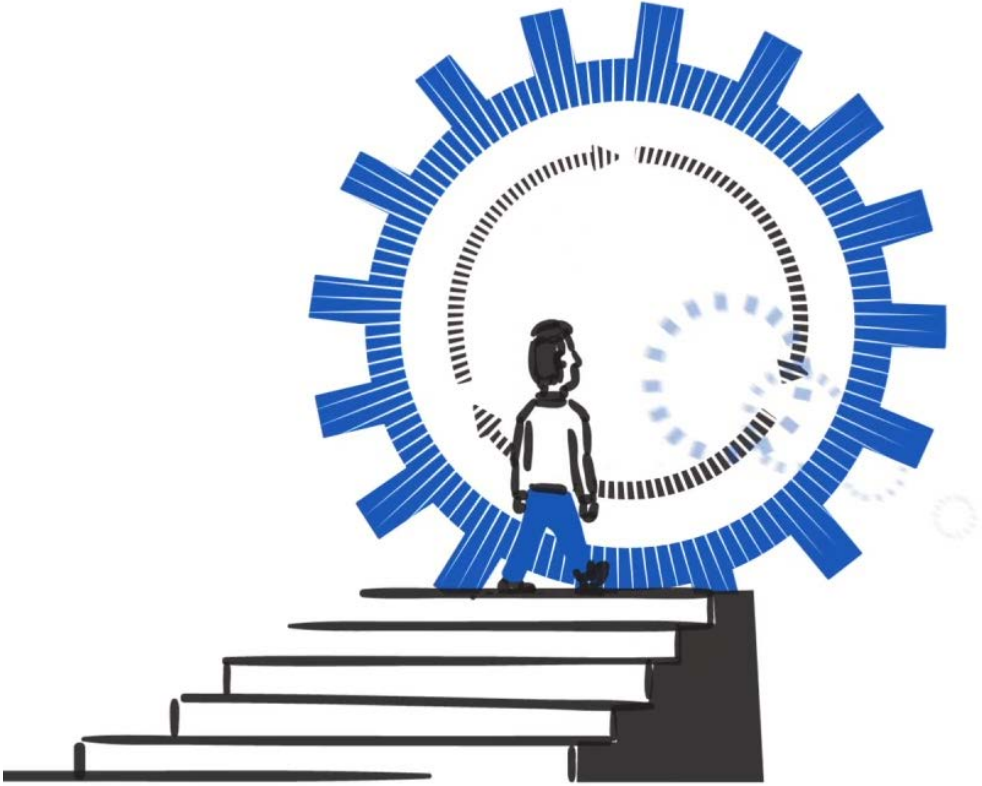
2nd life finance
in a Circular Economy

See what counts.

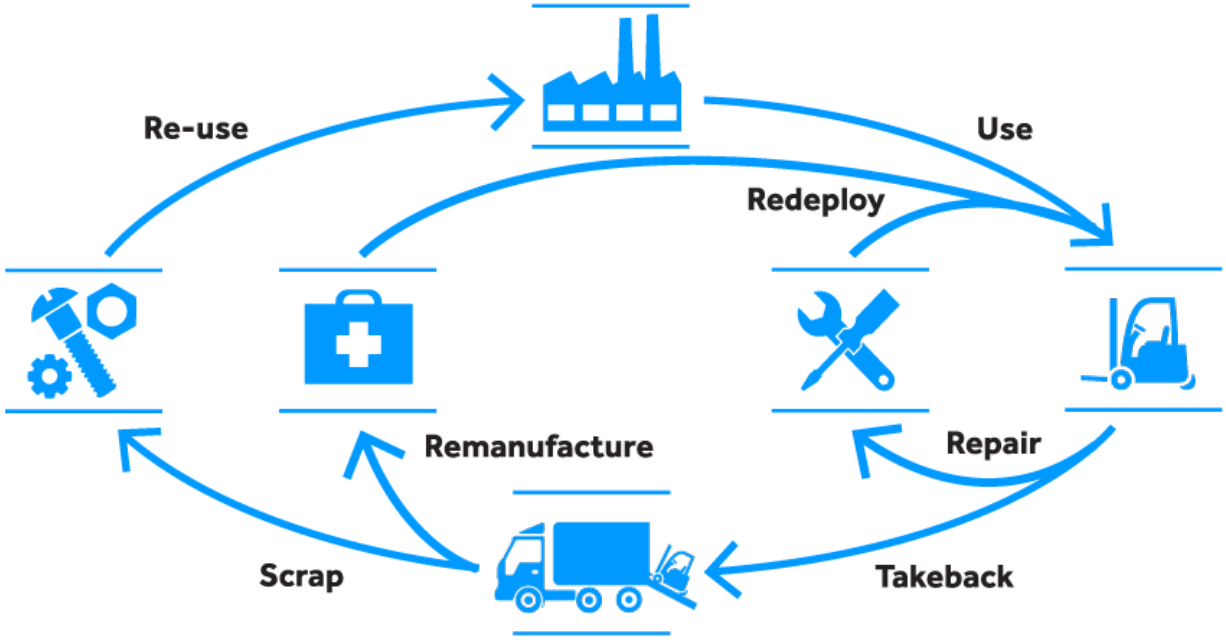
Focus of today



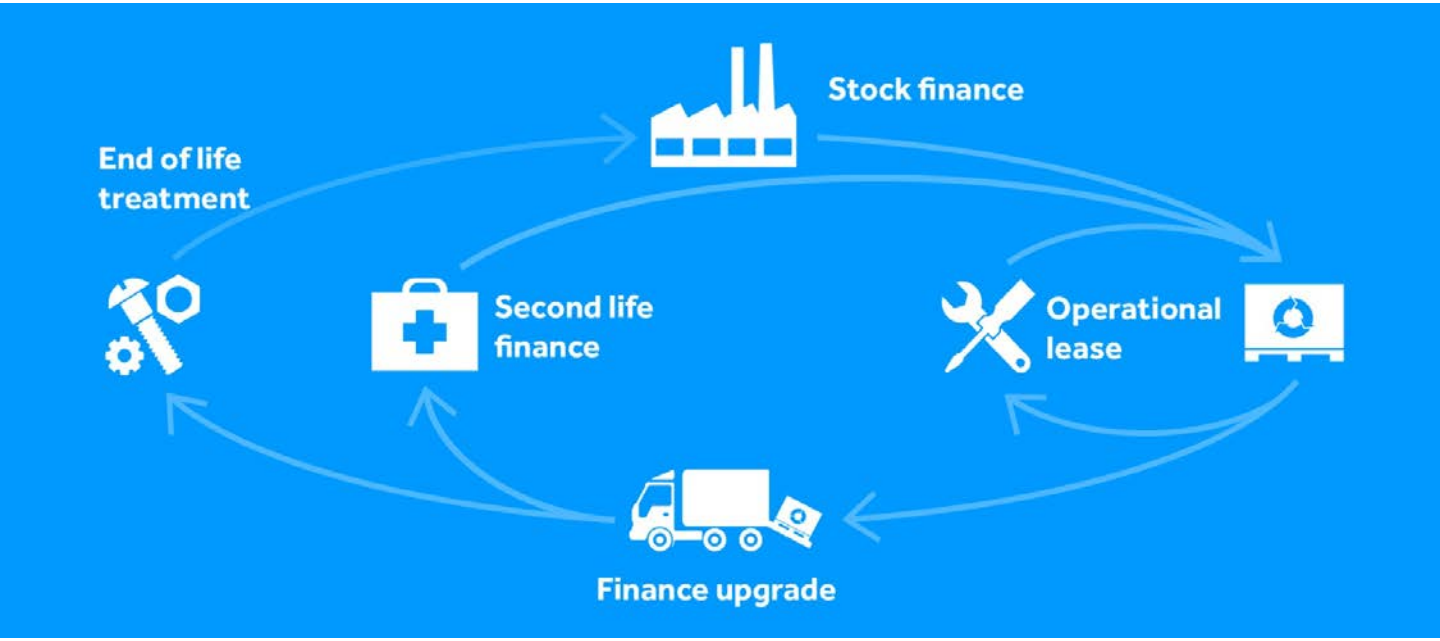
Build sustainable business **for the future**



Control the full technical lifecycle of assets



Therefore we develop new finance solutions



Focus - **Financing USED** vs NEW assets

We are **NOT** financing dodgy business

Challenge: lack of standards

- Re-Used
- Refurbished
- Remanufactured

Point of Sale Marketing activities

Wacker

60 Kommunal-, Land- & Forsttechnik

Im Interview: Spezialisten von Wacker Neuson zum Thema Gebrauchtmaschinen

IM GESPRÄCH MIT ANDREAS M. LOHNER, GESCHÄFTSFÜHRER WACKER NEUSON DEUTSCHLAND, UND PETER M. ADAM, LEITER VERTRIEB GEBRAUCHTMASCHINEN EUROPA BEI WACKER NEUSON

Führt eine Gebrauchtmaschine zur Kannibalisierung des Neugerätegeschäfts?

Lohner: Ergebnisse aus Markt- und Kundenbefragungen sowie unsere eigenen Erfahrungen zeigen, dass ein aktiv gestütztes Gebrauchtgeschäft keineswegs Neuverkäufe kannibalisieren muss. Vielmehr sprechen wir mit unserem Lösungsangebot gezielt unterschiedliche Kundenwünsche an. Deutschland ist im Schwerpunkt ein Markt mit einer hohen Nachfrage nach Neugeräten, ergänzt um junge Gebrauchte (unser Premium Used Angebot mit bis zu zwei Jahre jungen Maschinen) und das klassische Gebrauchtmaschinengeschäft (Used Classic Maschinen ab zwei Jahre). Ökonomische Überlegungen, Einsatzplanungen und auch das benötigte Produktportfolio sind häufig Motive für den Kauf einer Gebrauchtmaschine. Eine hochwertige Gebrauchtmaschine ist häufig der erste Schritt zur späteren Anschaffung einer Neumaschine mit kundenindividueller Ausstattung.

Egal für welche Maschine sich ein Kunde entscheidet, mit unserem flächendeckenden Vertriebs- und Servicenetz findet er bei Wacker Neuson stets eine optimale Lösung. Gebrauchtgeräte, Neugeräte, Vermietung, Service, Finanzierung und Versicherungen sind integraler Bestandteil des Angebots unserer regionalen Vertriebs- und Servicestandorte.

Wo liegen weitere Gründe für den Kauf einer Gebrauchtmaschine?

Adam: Neben den erwähnten ökonomischen Gründen sprechen die hohe Qualität und die Langlebigkeit eines Premiumprodukts für den Kauf einer Premium Used oder Used Classic Maschine, insbesondere wenn sie herstellergepflegt ist.

Durch unsere Wacker Neuson Finance Lösungen sind kurze und anpassungsfähige Finanzierungsprodukte leicht umzusetzen, da auch die Verwertungskonzepte eher flach verläuft. Diese Möglichkeit wird häufig in Verbindung mit unseren Wartungslösungen genutzt. Ein Unternehmer, der eine Maschine als Ergänzung für Auftragsspitzen benötigt, nutzt daher gerne die Möglichkeit „junger Gebrauchter". Ein weiterer Aspekt, der für eine Gebrauchtmaschine sprechen kann, ist die sofortige Verfügbarkeit. Mit unserem Programm „Testen ohne Risiko" kann der Kunde die Maschinen erst einmal anmieten und dann bei Gefallen und häufigerem Gebrauch übernehmen. Der Vorteil liegt auf der Hand: der Unternehmer und die Bediener auf der Baustelle sind mit der Maschine vertraut und eine weitere Einweisung entfällt. Das spart Zeit und Geld.

Was gehört zum idealen Leistungsprogramm bei Gebrauchtmaschinen?

Lohner: Im Idealfall bieten Hersteller und Händler ein regional spezifisches Sortiment entsprechend der Kundenwünsche vor Ort in ihrem Mietpark an. Mit der Steuerung über die Laufzeiten der Maschinen im Mietpark sind Gebrauchtmaschinen zu kundenindividuellen Preisen verfügbar. Gleichzeitig können beim Kunden vorhandene Gebrauchtmaschinen „fit" gehalten werden: vom regelmäßigen Technik-Check über Aufbereitungsmaßnahmen bis hin zur Generalüberholung. Dies kann auch in Verbindung mit Full-Service-Lösungen erfolgt werden, um Ausfallzeiten gering zu halten und gleichzeitig den Werterhalt der Maschinen zu steigern.

Adam: Wacker Neuson bietet seinen Kunden auch die Inzahlungnahme ganzer Flottenbestände im Austausch an und entlastet damit Kunden bei der weiteren Verwertung oder Vermarktung dieser Maschinen. Gerade hier hilft den Kunden die internationale Aufstellung von Wacker Neuson. Zusammengefasst: Kauf, Wartung, Reparatur, Aufbereitung, Finanzierung bis hin zur Inzahlungnahme – alles ist möglich und aus einer Hand.

Worin liegt der besondere Vorteil, sich für eine „Premium Used" Maschine zu entscheiden?

Lohner: Bei unseren Premium Used Maschinen handelt es sich stets um junge, herstellergepflegte, hochwertige Gebrauchte. Premium Used Maschinen sind weniger als zwei Jahre alt und verfügen stets über ein Jahr Gewährleistung. Man kann sich das wie den klassischen Jahreswagen im Automobilbereich vorstellen. Verfügbar sind die Premium Used Maschinen an über 60 eigenen Standorten von Wacker Neuson in Deutschland, ergänzt durch weitere 50 Standorte unserer Vertriebspartner.

Wie steuert Wacker Neuson das internationale Gebrauchtmaschinengeschäft?

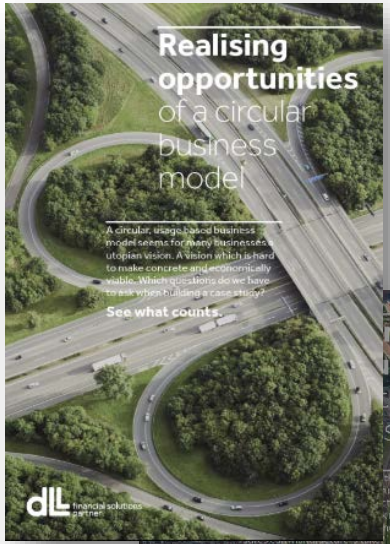
Adam: Um das Gebrauchtmaschinengeschäft grenzüberschreitend innerhalb Europas zu koordinieren und so kosteneffizient wie möglich gestalten zu können, gibt es bei Wacker Neuson einen Zentralbereich Gebrauchtmaschinen Europa. Diese Spezialisierung im Gebrauchtmaschinenhandling spiegelt sich auch in attraktiven Verkaufspreisen wider. Die europäischen Märkte sind sehr unterschiedlich. Deshalb ist es für Wacker Neuson wichtig, die Abflüsse der Gebrauchtmaschinen gezielt nach dem Bedarf der jeweiligen Länder steuern, und vor Ort bedarfsgerechte Maschinen anbieten zu können.

Andreas M. Lohner, Geschäftsführer Wacker Neuson Deutschland

Peter M. Adam, Leiter Vertrieb Gebrauchtmaschinen Europa bei Wacker Neuson

Maschinen&Technik April 2015

dll financial solutions partner


Realising opportunities of a circular business model
A circular, usage-based business model seems for many businesses a utopian vision. A vision which is hard to make concrete and economically viable. Which questions do we have to ask when building a case study?
See what counts.
financial solutions partner

Sustainable returns by recovering used assets
See what counts.
financial solutions partner

Bluepaper
Professionalizing used asset sales with dedicated promotion materials
The professional sales of used assets is becoming increasingly important for manufacturers. But how should you create dedicated promotion materials that put your used assets in the spotlight they deserve?
See what counts.
financial solutions partner

See what counts.

manufacturers and dealers learn from these insights?
See what counts.

Bluepaper
Things can mean for your business through providing a series of real case examples.
See what counts.
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See what counts.

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15:00 Break

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RITCHIE BROS.

Introduction to Ritchie Bros.

First auction
1958

First auction in Europe
1987

NYSE

Listed on NYSE
1998

TSX

Listed on TSX
2004

Acquisitions

MASCUS

Feb.2016

IRON PLANET

Aug 2016

RITCHIE BROS.

More Ways We Deliver

$4.5B
In gross transactional value

400+
unreserved onsite auctions with online bidding

78
weekly online auctions

40+
auction sites in 12 countries

4.4M+
average monthly website visitors

3.3M
registered website users

170K+
buyers

RITCHIE BROS.

All numbers from 2017 / GTV in USD

Leveraging our auction DNA into a broad suite of solutions

rb Asset Solutions

Integrated Onsite + Online Auctions

- RITCHIE BROS. Auctioneers
- AUCTION SERVICES CAT
- KRUSE ENERGY
- Petrowsky Auctioneers — A Ritchie Bros. solution
- KRAMER AUCTIONS — A Ritchie Bros. solution

Online Marketplaces

- IRON PLANET
- Marketplace — An IronPlanet solution

Listing Service

- MASCUS

Sector related branded sites

- FLEETLOCATOR — Introducing a NEW Way to Buy Trucks!
- GOVPLANET
- SalvageSale — POWERED BY RITCHIE BROS.

Brokerage

- PRIVATE TREATY — A Ritchie Bros. Solution

Supporting All Phases of the Equipment Lifecycle

Asset Solution – Equipment Lifecycle

1. Start Asset Disposition
2. Capture & Load Asset Details
   - AAS
   - iInspector
   - Mascus Applications
   - Data Export to Upload
3. Inventory Mgt. Platform

4. Pricing Tool
   - Asset Level Pricing
   - Depreciation Tool
   - Pricing Trends
   - Optimal Sale Time (seasonality)
5. Upsell to Drive Price & SOW
   - Financing
   - Refurb
   - Warranty
   - Attachments
   - Etc.
6. Send to Channel/Product

7. Marketing Engine

8. Transactional Engine
   - Liens/Title, etc.
   - Invoicing
   - Settlement
10. Data Dashboards and Insight

All-inclusive service

- Inventory management
- Used equipment website platforms
- Assistance Repossession
- Logistics and shipping (RBL)
- Storage
- Inspections
- Valuations
- Refurbishing
- Insurance

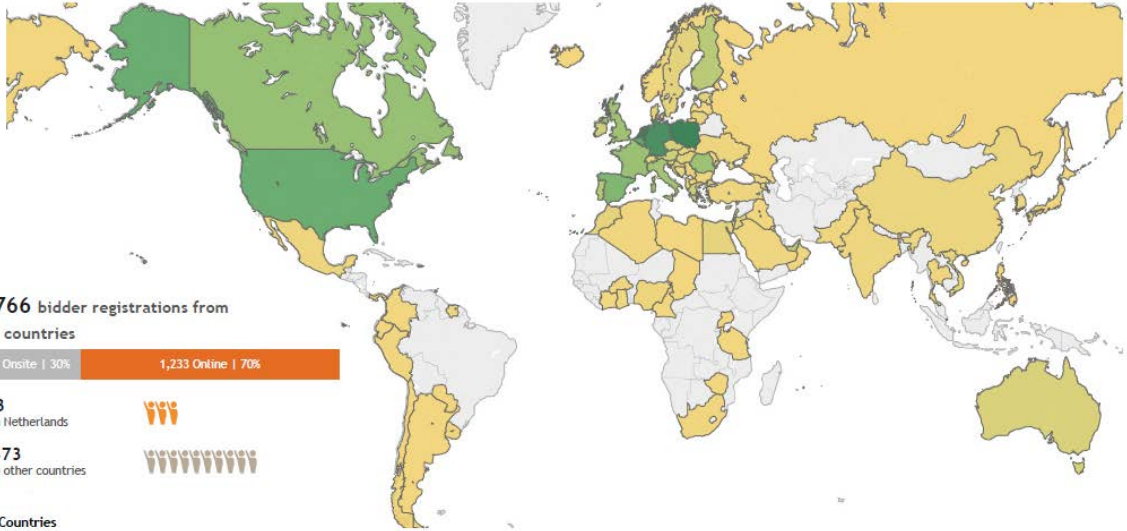
RITCHIE BROS.

Growing Global Demand

Our global network and reach, sales solutions and services bring the most motivated buyers from around the planet. Selling with us means world-class representation of your equipment online and onsite.

RITCHIE BROS.

Auction results | Moerdijk May, 2018



1,766 bidder registrations from **91** countries

533 Onsite | 30% — 1,233 Online | 70%

393 from Netherlands

1,373 from other countries

Top Countries

Netherlands	393	United Kingdom	52	Australia	16	Morocco	9
Poland	189	Italy	48	Hungary	13	Serbia	9
Germany	134	Portugal	36	Croatia	12	Viet Nam	9
Belgium	100	Finland	35	Estonia	11	Denmark	8
United States	90	UAE	34	Lebanon	11	Israel	8
Spain	72	Ireland	23	Sweden	10	Slovenia	8
Canada	57	Austria	22	Egypt	9	Switzerland	8
France	54	Greece	21	Jordan	9	Kuwait	7
Romania	53	Czech Republic	18	Lithuania	9	Slovakia	7

RITCHIE BROS.

RITCHIE BROS. Auctioneers

Auction results | Moerdijk May, 2018

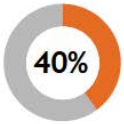
35,228,882 EUR
equipment sold

623
buyers

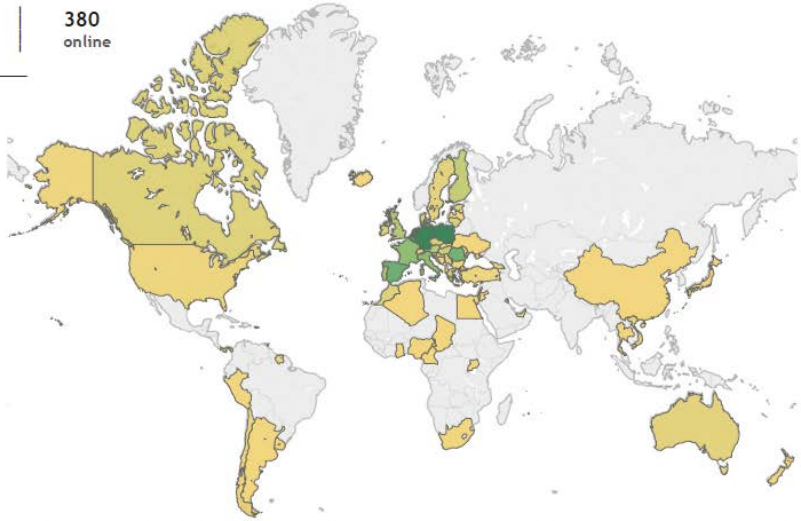
380
online

5.03M EUR
to Netherlands

30.20M EUR
to other countries



14.09M EUR
sold online



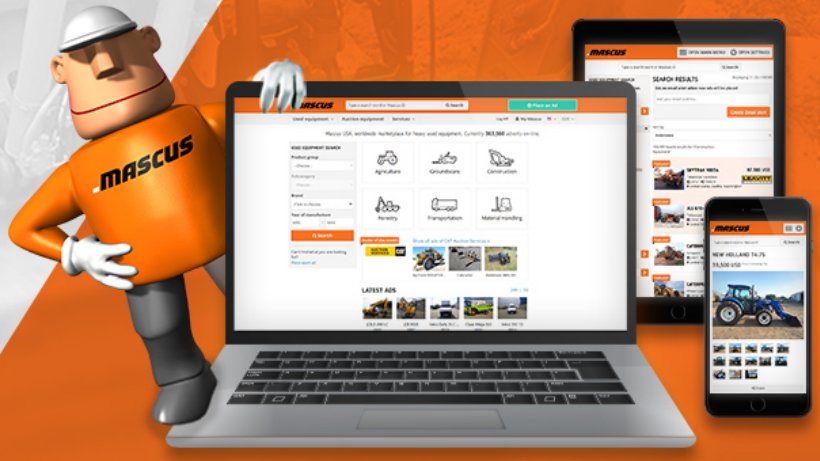
Top Countries

Netherlands	150	5,029,000 EUR	Australia	4	1,063,000 EUR	Algeria	1	408,000 EUR	Croatia	6	300,820 EUR
Germany	53	4,199,960 EUR	Romania	27	1,025,730 EUR	Austria	12	399,105 EUR	Albania	2	229,585 EUR
Poland	80	3,040,605 EUR	Switzerland	1	892,500 EUR	Estonia	5	398,495 EUR	Japan	1	212,500 EUR
Italy	21	2,070,612 EUR	Morocco	5	724,035 EUR	Cyprus	3	390,745 EUR	Sweden	4	212,500 EUR
Belgium	43	1,992,875 EUR	Finland	10	627,350 EUR	Hong Kong	4	383,500 EUR	Georgia	3	191,825 EUR
Kuwait	2	1,880,270 EUR	Israel	5	507,400 EUR	Greece	7	346,800 EUR	Uganda	1	158,050 EUR
Spain	29	1,256,875 EUR	Czech Republic	7	489,330 EUR	Chad	1	345,000 EUR	UAE	4	158,000 EUR
France	21	1,204,685 EUR	Canada	5	486,500 EUR	South Africa	1	325,000 EUR	Viet Nam	3	153,000 EUR
United Kingdom	13	1,166,950 EUR	Portugal	15	456,145 EUR	Ireland	5	303,320 EUR	Serbia	5	148,065 EUR

RITCHIE BROS.

RITCHIE BROS. Auctioneers

Asset valuation tools for portfolio & asset management



Mascus history

2001

- Founded by Partek Corp. as one of the first online B2B trading platforms

PARTEK
HIAB
KALMAR
VALTRA
Valmet

2003

- Growth capital provided by Alma Media, a Finnish media company

2003 - 2006

- Expansion into the Nordics.
- Opening UK and Ireland offices
- **Marknadspriser** starts 2006 together with KVD
  - Buys data from Mascus

2007 - 2008

- Rapid expansion across Europe
- Quick growth in traffic and content

2009 - 2012

- KVD sells **Marknadspriser** to Mascus in 2010

MARKNADSPRISER
Prisstatistik o Värderingar

2013 - 2016

- MBO Mascus
- Move HQ to Netherlands

2016

- Ritchie Bros. buys Iron Planet

2017

RITCHIE BROS. Auctioneers
IRON PLANET

100% Daughter company of Ritchie Bros:

- Many more plans…

Mascus in a nutshell

400 000
used equipment for sale in 6 sectors

HITACHI
PONSSE

6 000
Clients

Since
2000

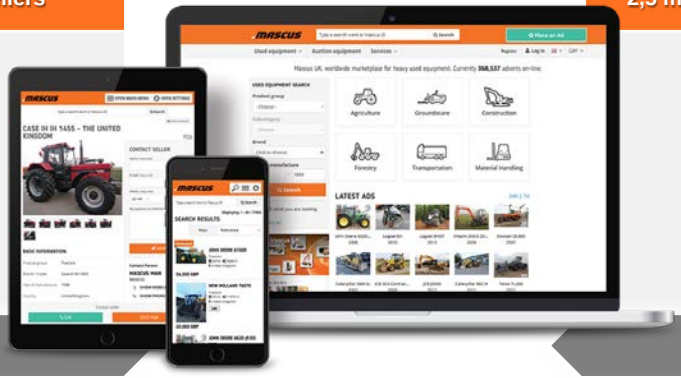
In 58
Country web sites

38 languages
and **150** currencies

Who is using Mascus

6 000 professional sellers

- Dealers
- Traders
- OEMs
- Auctioneers
- Rental companies
- Major contractors
- And private persons and small entrepreneurs



2,5 million unique buyers / months

- Dealers
- Traders
- Importers
- Transporters
- Entrepreneurs
- Farmers
- Contractors

Supply **Demand**

Number of listings April 2018 (World)

Construction		Agriculture		Transport		Material Handling		Forestry	
MASCUS	**196,336**	TractorHouse.com	202,410	Commercial Truck Trader.com	226,661	forklift	79,566	MASCUS	**7,949**
Machinery Trader	147,763	tractorpool	105,458	mobile.de	164,110	supralift	45,052	Machinery Trader	5,131
MachineryZone.com Used equipment online	120,040	Agriaffaires.co.uk USED EQUIPMENT ONLINE	96,945	Truck Paper	141,100	MASCUS	**27,271**	MachineryZone.com Used equipment online	3,085
ROCK & DIRT	79,571	MASCUS	**85,474**	TRUCK SCOUT 24	96,210	Machinery Trader	22,226		
Equipment TraderOnline.com	37,029	Terre-net	85,000	MASCUS	**77,724**	MachineryZone.com Used equipment online	14,346		

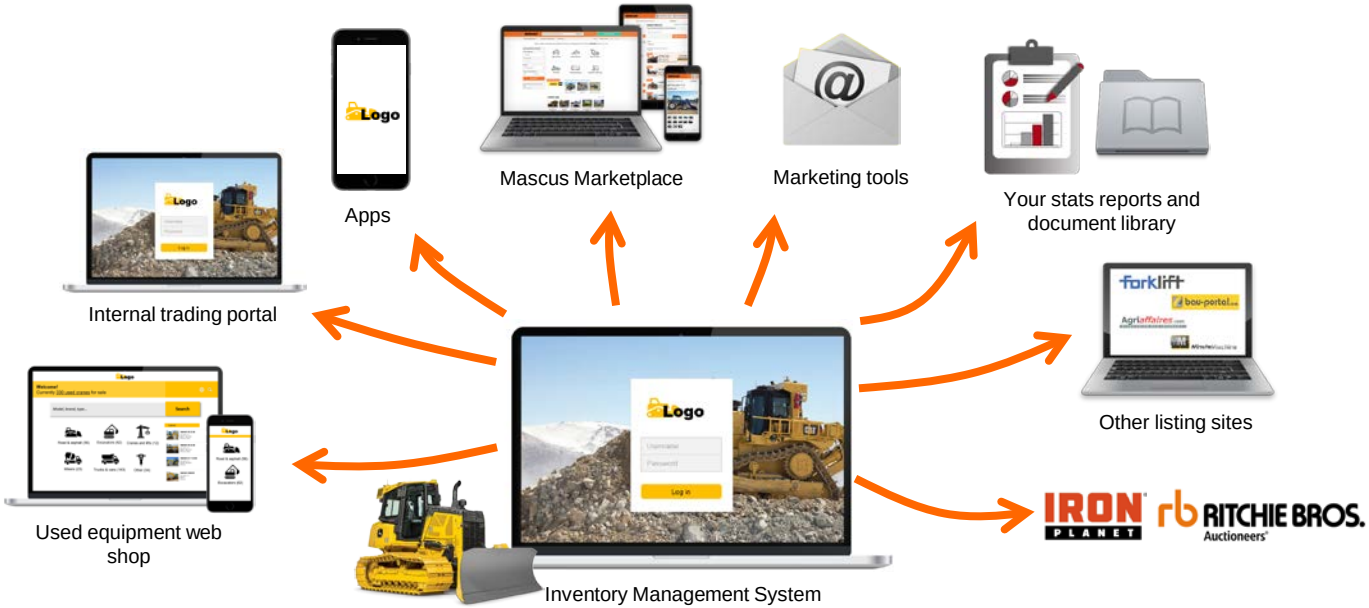
Our customer references

Construction	Agriculture	Transport	Material Handling	Forestry
VOLVO	JOHN DEERE	Mercedes-Benz	TOYOTA MATERIAL HANDLING	KOMATSU
CATERPILLAR	CASE IH	VOLVO	Linde	JOHN DEERE
KOMATSU	VALTRA	SCANIA	KALMAR	PONSSE
Atlas Copco	MASSEY FERGUSON	MAN	ATLET	LOGSET
HITACHI Hitachi Construction Machinery	NEW HOLLAND AGRICULTURE	DAF	MANITOU	ROTTNE
			Rocla	
			JUNGHEINRICH	

Remarketing Solutions

Inventory Management System

One solution for everything

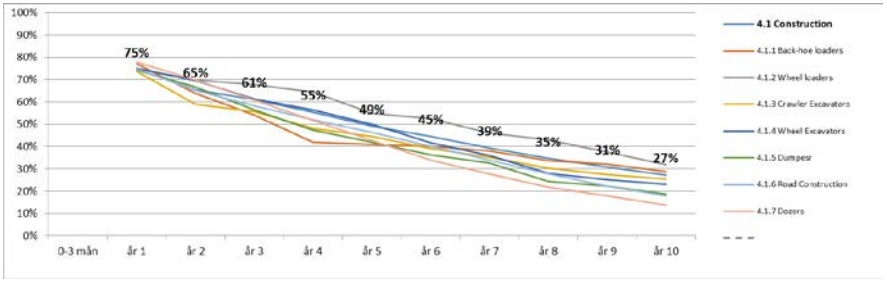


Mascus Value Index Services

Capital Adequacy

Mascus capital adequacy service

- Valuation services for banks, leasing companies, liquidators, insurance companies and public authorities
  - 15 years in financial services
  - 25+ years in valuation services
- We are using a method that has been approved by the Swedish financial inspection, together with the Basel Committee, as a instrument for Basel II/III requirements
- Market analysis and valuations are carried out by specialists
- Everything from individual items to entire credit holdings in accordance with the Basel III-rules
- Basel III demands that a bank must hold capital reserves appropriate to the risk the bank exposes itself to through its lending and investment practices



Our statistical database

Approximate number of sales reports in the database:

- **Mascus 1 500 000**
- **Ritchie Bros. 1 300 000**
- **IronPlanet 500 000**
- **CAT Auction (2018)**

Data from 45 countries	Data collected since 1995	Data up to 10 years old used to construct curves	Updated with approximately 70 000 objects each month

Capital requirements directive Basel II

The institute may be given permission to calculate other non-financial assets than customer claims and real estates to have an acceptable financial security if the following conditions are met:

1. There is an available second-hand market for the asset

2. There are publicly available well established market prices for the asset

3. The institute can prove that the prices the institue put into practice does not considerably divert from the market price

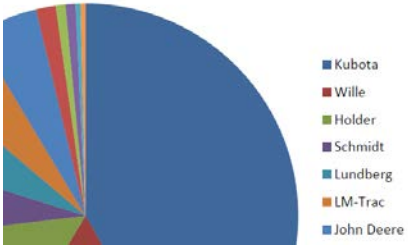
Mascus Capital Adequacy services methodology

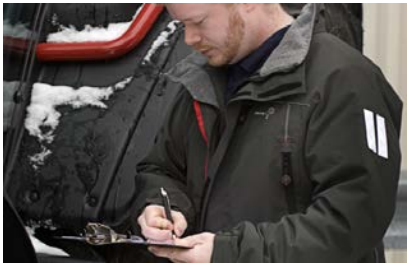
Proves that the assets have an available and functional second hand market	Gives verified well established market prices for the assets	The prices are publicly available	Can, when applied on a finance stock, prove that value of the assets do not considerably divert from the market price

A methodology that has been repeatedly approved as an instrument for finance institutes to tackle the Basel II/III requirements

Services

34%	29%	24%	21%	19%	16%
39%	34%	26%	22%	18%	13%
31%	27%	21%	18%	15%	11%
39%	34%	26%	22%	18%	13%
39%	35%	27%	23%	19%	14%
40%	31%	22%	16%	13%	9%
34%	28%	20%	14%	10%	5%
40%	34%	28%	23%	19%	15%
39%	33%	28%	22%	17%	12%
40%	34%	28%	23%	19%	15%





- Market value and Security value curves
  - Country specific
  - Region specific
  - Global
- Auction sale based
  - Regional

- Market analysis
- Desktop appraisals

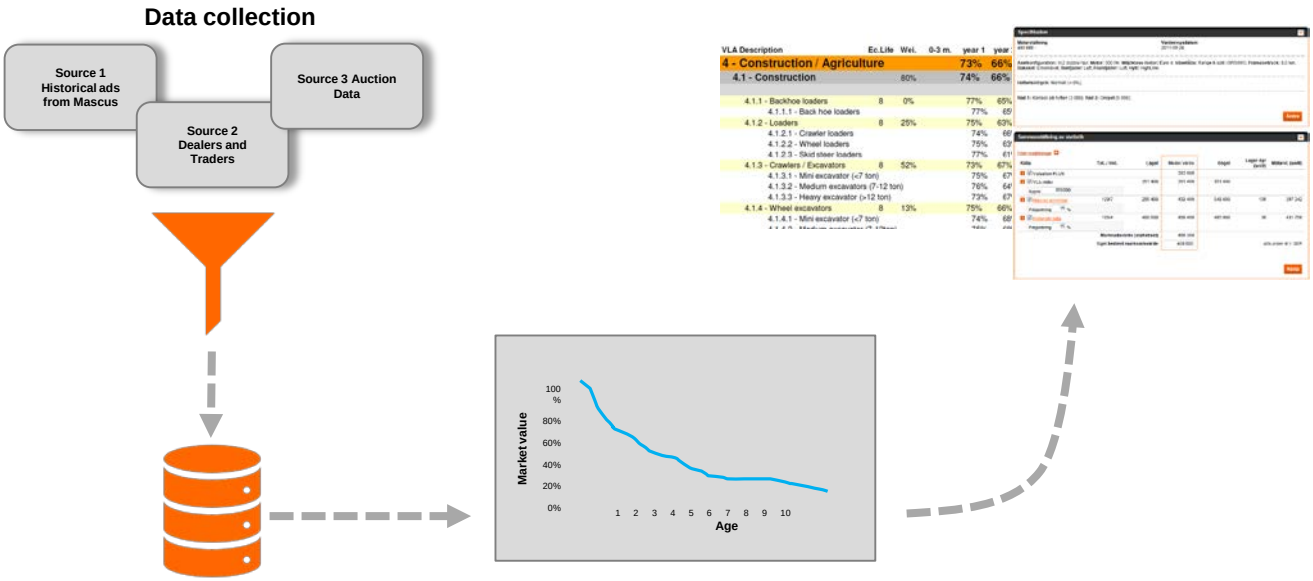
- On site evaluation

Capital adequacy

Material handling

VLA Description	Ec.Life	Wei.	0-3 m.	year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10
5 - Material handling				**78%**	**68%**	**58%**	**51%**	**46%**	**40%**	**37%**	**33%**	**31%**	**27%**
5.1 - Forklifts		45%		**74%**	**62%**	**54%**	**47%**	**41%**	**37%**	**34%**	**31%**	**29%**	**27%**
5.1.1 - Reachstackers	4	19%		68%	60%	50%	43%	37%	31%	25%	20%	17%	15%
5.1.1.1 - Reachstackers, joint				68%	60%	51%	43%	37%	31%	24%	19%	15%	13%
5.1.1.2 - Reachstackers, sit				68%	58%	47%	42%	36%	31%	26%	22%	20%	17%
5.1.1.3 - Reachstackers, stand				69%	61%	53%	47%	39%	33%	28%	24%	20%	17%
5.1.1.4 - Reachstackers, platform				70%	58%	47%	40%	34%	26%	23%	20%	18%	15%
5.1.2 - Counterweightforklifts	7	63%		76%	65%	58%	51%	46%	42%	40%	37%	36%	34%
5.1.2.1 - Electric powered				70%	55%	43%	36%	31%	28%	25%	22%	21%	19%
5.1.2.2 - Diesel powered				80%	72%	67%	61%	56%	51%	49%	46%	45%	44%
5.1.2.3 - Gas powered				70%	50%	37%	32%	28%	25%	22%	20%	18%	17%
5.1.3 - Low lifters	4	3%		70%	51%	35%	27%	20%	16%	13%	11%	9%	8%
5.1.3.1 - Low lifters				70%	51%	35%	27%	20%	16%	13%	11%	9%	8%
5.1.4 - Man down turret trucks	4	11%		70%	55%	45%	36%	30%	26%	22%	21%	20%	18%
5.1.4.1 - Man down turret trucks				70%	55%	45%	36%	30%	26%	22%	21%	20%	18%
5.1.5 - Narrow aisle trucks	4	0%		70%	55%	45%	37%	31%	27%	24%	20%	18%	16%
5.1.5.1 - Narrow isle trucks				70%	55%	45%	37%	31%	27%	24%	20%	18%	16%
5.1.6 - Order pickers	4	4%		70%	54%	42%	33%	28%	24%	21%	18%	16%	15%
5.1.6.1 - Order picker low				70%	58%	49%	40%	35%	29%	25%	21%	19%	18%
5.1.6.2 - Order picker middlehigh				70%	51%	35%	27%	22%	19%	17%	15%	13%	12%

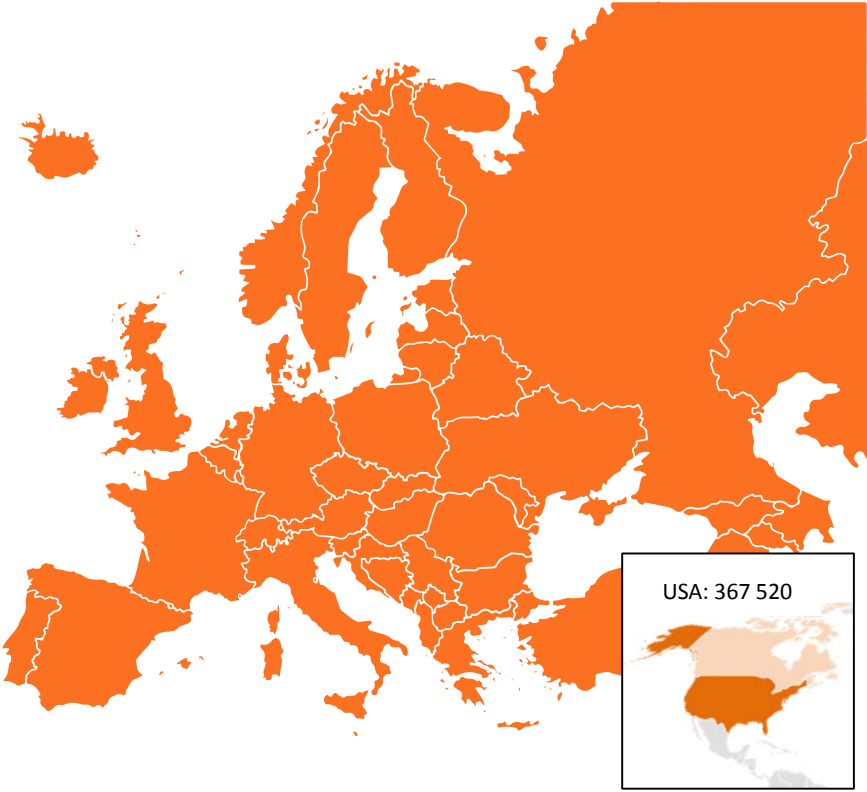
Data collection method (Capital adequacy)



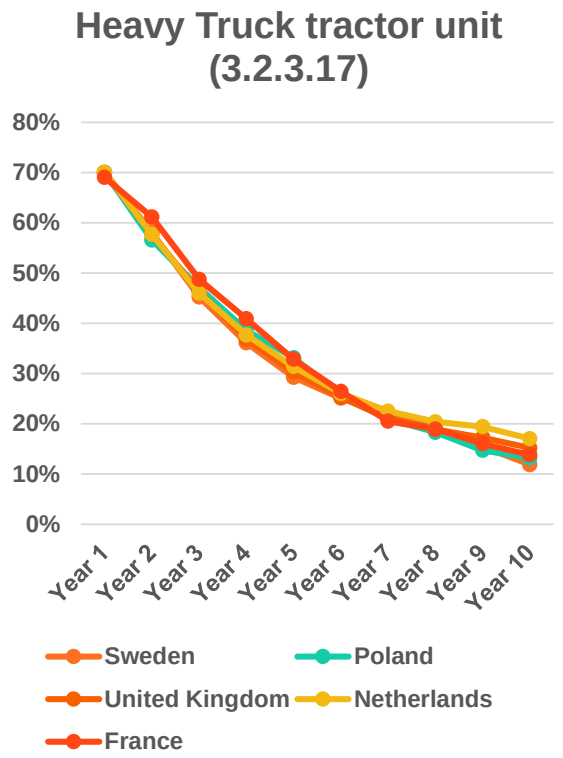
VLA Description	Ec.Life	Wei.	0-3 m.	year 1	year
4 - Construction / Agriculture			73%	66%	
4.1 - Construction		80%	74%	66%	
4.1.1 - Backhoe loaders	8	0%	77%	65%	
4.1.1.1 - Back hoe loaders			77%	65	
4.1.2 - Loaders	8	25%	75%	63%	
4.1.2.1 - Crawler loaders			74%	66	
4.1.2.2 - Wheel loaders			75%	63	
4.1.2.3 - Skid steer loaders			77%	61	
4.1.3 - Crawlers / Excavators	8	52%	73%	67%	
4.1.3.1 - Mini excavator (<7 ton)			75%	67	
4.1.3.2 - Medium excavators (7-12 ton)			76%	64	
4.1.3.3 - Heavy excavator (>12 ton)			73%	67	
4.1.4 - Wheel excavators	8	13%	75%	66%	
4.1.4.1 - Mini excavator (<7 ton)			74%	68	

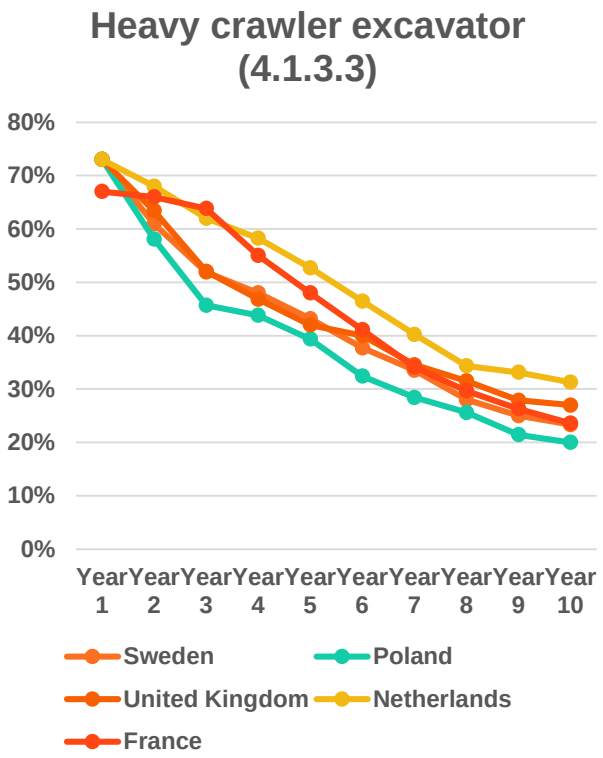
Data share per country in the world (Examples)

Germany	256 243
Netherlands	132 774
Sweden	114 800
Finland	96 169
Poland	77 713
Denmark	75 996
Norway	61 026
United Kingdom	56 695
France	50 848
Belgium	34 957
Spain	33 120
Hungary	13 341
Italy	12 359
Russia	10 829

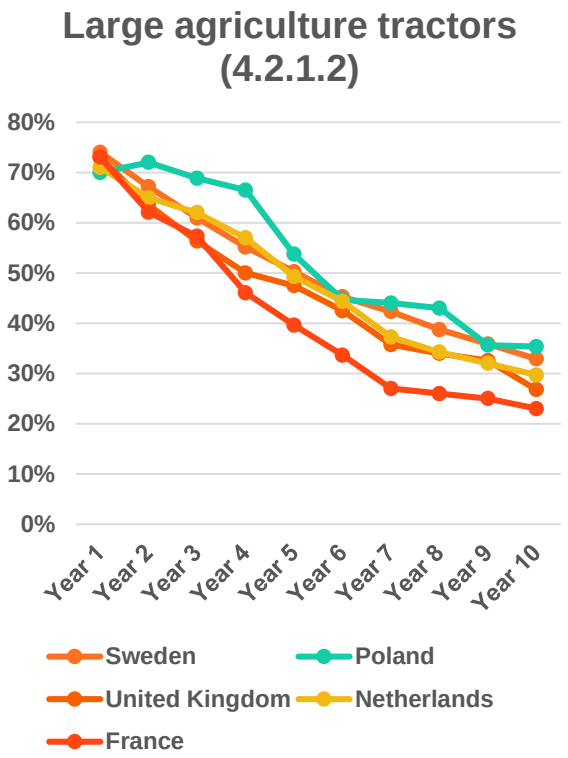


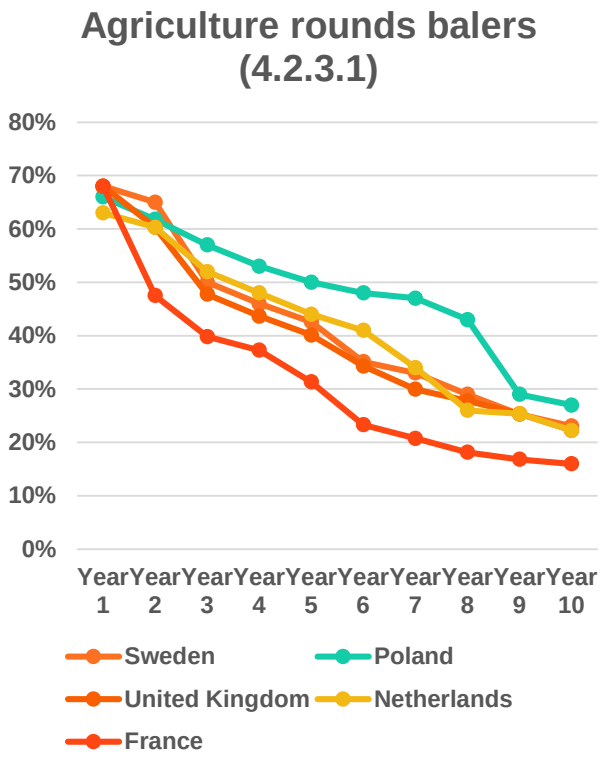
Different countries depreciation examples



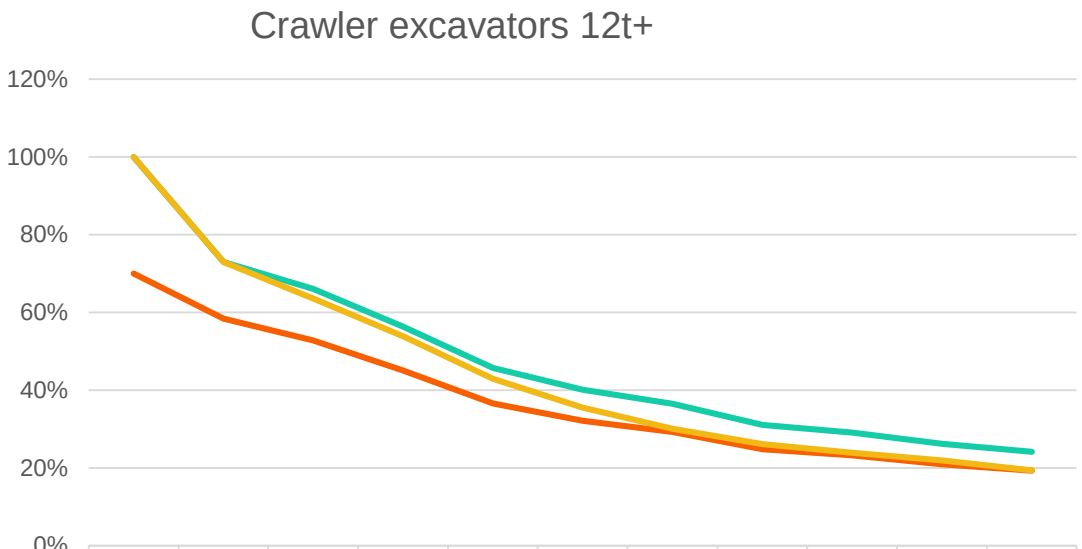


Different countries depreciation examples





Compare auction data to VLA index



	0	1	2	3	4	5	6	7	8	9	10
VLA EU	100%	73%	66%	56%	46%	40%	37%	31%	29%	26%	24%
Security value	70%	58%	53%	45%	37%	32%	29%	25%	23%	21%	19%
Int. Auction data	100%	73%	64%	54%	43%	36%	30%	26%	24%	22%	19%

VLA EU Security value Int. Auction data

Product specifications

Best collection of data in the industry

24 / 7 / 365 access package through XML feeds

x4 releases a year with Excel/PDF versions for regions and countries

Always maintained and **up to date** database

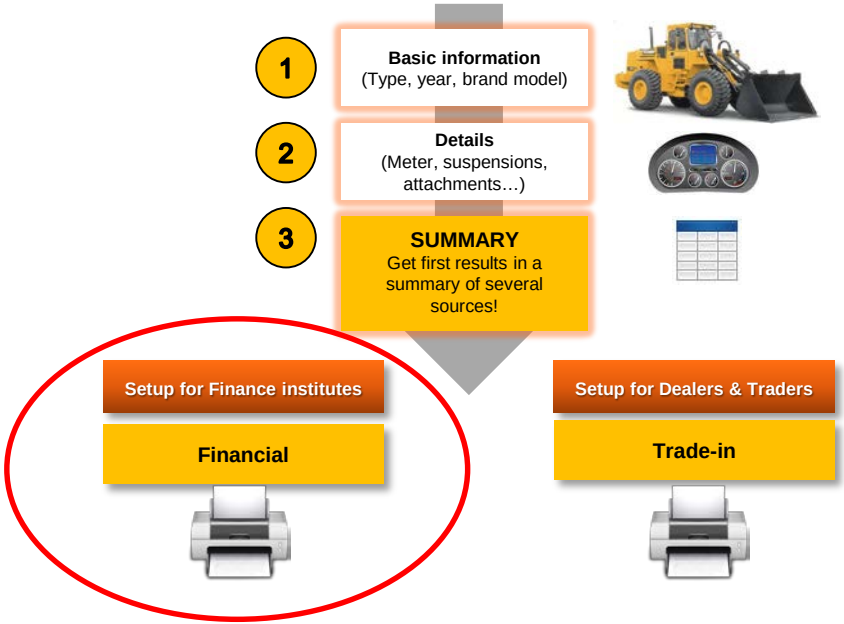
Wide product range!

- Workshop / Printing
- Agriculture
- Construction
- Transport
- Materialhandling
- Forestry

Mascus valuation tools

Price indicator & Finance calculator

Working with our valuation tool



1. Basic information about the equipment

Basic information

Industry *
Construction / Agriculture

Make
Caterpillar

Product
Construction

Usage
Loaders

Manufacturing year *
2016

Range
Wheel loaders

Vehicle key

Next

2. Summary

Statistics summary

Source	Total / Used	Min	Average	Max	Days on ad	Avg. meter
☑ Mascus Valuator	-	63 100	65 700	67 000	-	-
☑ Mascus live Ads	24 / 10	60 100	74 800	77 500	125	40 000
☑ Real sales price (Ads)	19 / 17	66 900	67 800	69 100	107	45 000
☐ Historical Ads	78 / 25	71 400	69 200	84 200	78	43 000
☑ VLA Index	-	65 200	67 200	69 400	-	-
		Average Market value	69 200			
		My own Market value	65 100			*All prices in €*

Next

3. Statistic details

Source view

Current filter:
Sweden

Change

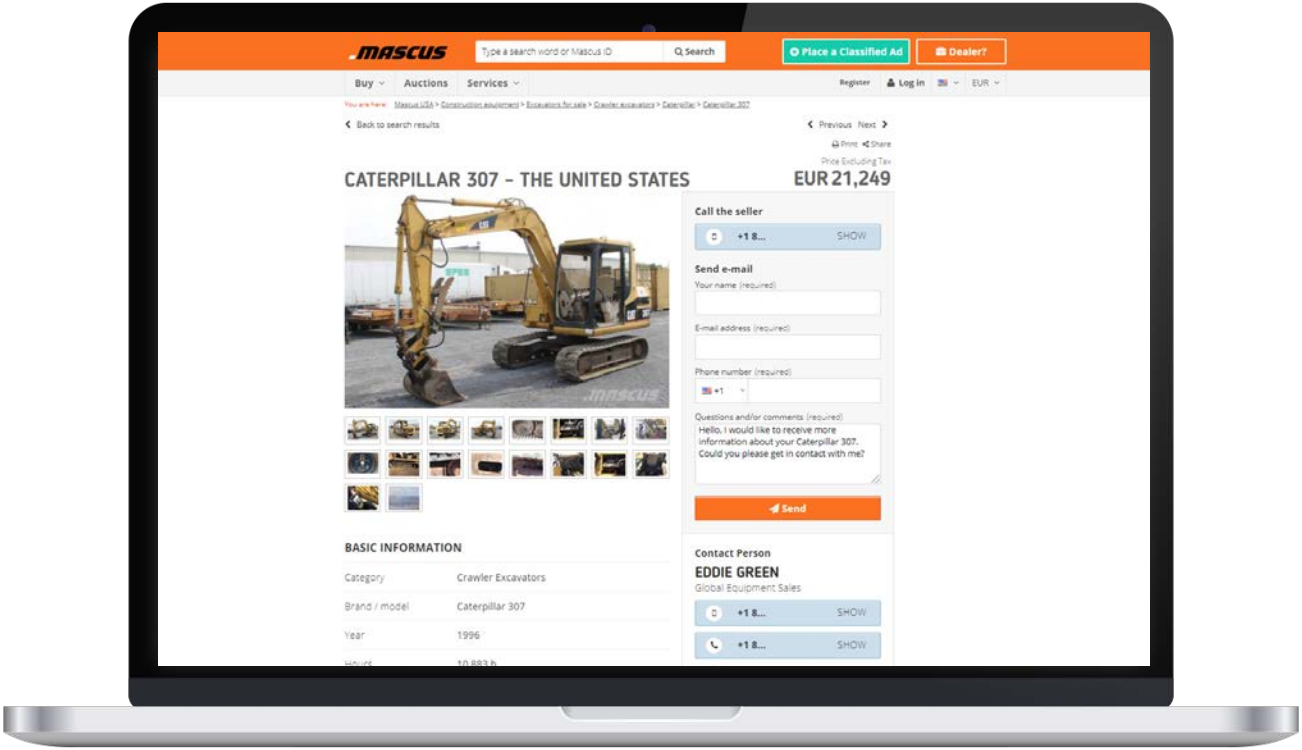
Show records with a price and manufacturing year according to:
Show only selected | Manufacturing year | Manufacturing year +/-1 years | ▸ Manufacturing year +/-2 years (all) | Show exact

Select records from result llist according to:
Select filtered | Unselect all

Description	Year	Price	Days	Meter	Date	Country	Details
☑ Caterpillar 307C	2005	39 510	59	3 500	2013-03-18	SE	Show...
☑ Caterpillar 307C	2005	38 570		3 500	2013-03-18	SE	Show...
☑ Caterpillar 307C	2005	51 150	45	3 500	2013-07-01	SE	Show...
☑ Caterpillar 307C	2005	51 450	38	3 500	2013-08-08	SE	Show...
☑ Caterpillar 307C	2005	51 870	56	3 500	2013-10-03	SE	Show...
☑ Caterpillar 307C	2005	50 390	41	3 500	2013-11-13	SE	Show...
☑ Caterpillar 307C	2005	33 490	26	3 500	2013-12-09	SE	Show...
☑ Caterpillar 307C	2007	42 810	199	3 750	2014-06-16	SE	Show...
☑ Caterpillar 307C	2005	33 950	44	3 500	2014-01-22	SE	Show...
☑ Caterpillar CAT 307C eng...	2006	47 270	111	4 093	2013-12-11	SE	Show...
☑ Caterpillar CAT 307C med...	2007	60 600	431	3 508	2013-08-14	SE	Show...
☑ Caterpillar CAT 307C rot...	2006	48 690	304	4 062	2013-08-22	SE	Show...
☑ Caterpillar CAT 307C rot...	2006	53 140	309	3 188	2013-09-01	SE	Show...
☑ Caterpillar CAT 307C SB ...	2007	53 320	110	3 713	2013-12-02	SE	Show...
☑ Caterpillar CAT 307C sve...	2006	45 920	23	3 197	2013-09-24	SE	Show...

Close

4. Object card



Setup financing (example)

Calculation

Current value according to VLA

Price when new	Market value	Security value
105 000	71 400 (68 %)	57 120 (54 %)

Future value development

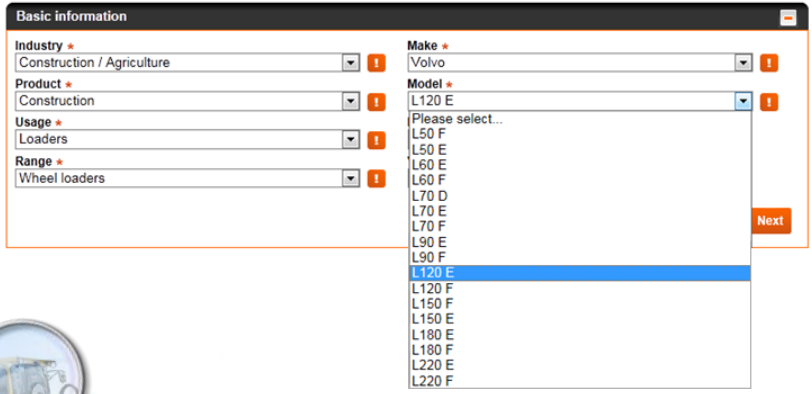
Initial value	Contract length
65 100	60 months (5 years)

Period	Market value	Security value
12 months (3 years old)	56,000 (59 %)	45,000 (47 %)
24 months (4 years old)	50,000 (52 %)	40,000 (42 %)
36 months (5 years old)	44,000 (46 %)	35,000 (37 %)
48 months (6 years old)	38,000 (40 %)	31,000 (32 %)
60 months (7 years old)	32,000 (34 %)	26,000 (27 %)

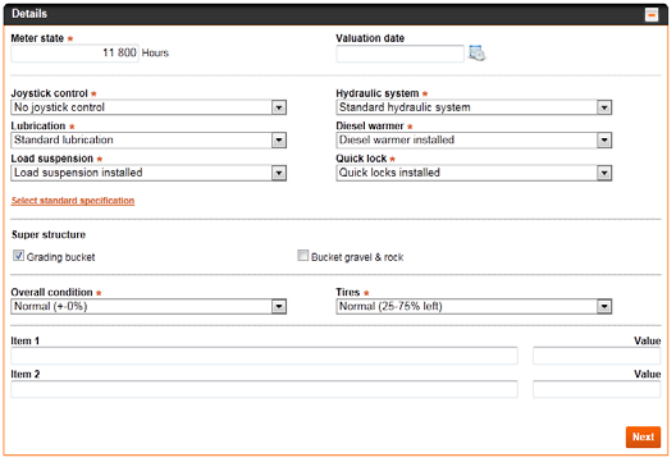
Presented values are based on the input value is correct. Input value is affected by factors such as model, specification, condition, Mileage, and the general market.

Working with our valuation tool

1. Basic information about the equipment



2. Details


Details
Meter state *
11 800 Hours
Valuation date
Joystick control *
No joystick control
Hydraulic system *
Standard hydraulic system
Lubrication *
Standard lubrication
Diesel warmer *
Diesel warmer installed
Load suspension *
Load suspension installed
Quick lock *
Quick locks installed
Select standard specification
Super structure
Grading bucket
Bucket gravel & rock
Overall condition *
Normal (+-0%)
Tires *
Normal (25-75% left)
Item 1
Value
Item 2
Value
Next

3. Summary

Statistics summary

Source	Total / Used	Min	Average	Max	Days on ad	Avg. meter
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☑ Caterpillar 307C	2005	33 490	26	3 500	2013-12-09	SE	Show...
☑ Caterpillar 307C	2007	42 810	199	3 750	2014-06-16	SE	Show...
☑ Caterpillar 307C	2005	33 950	44	3 500	2014-01-22	SE	Show...
☑ Caterpillar CAT 307C eng...	2006	47 270	111	4 093	2013-12-11	SE	Show...
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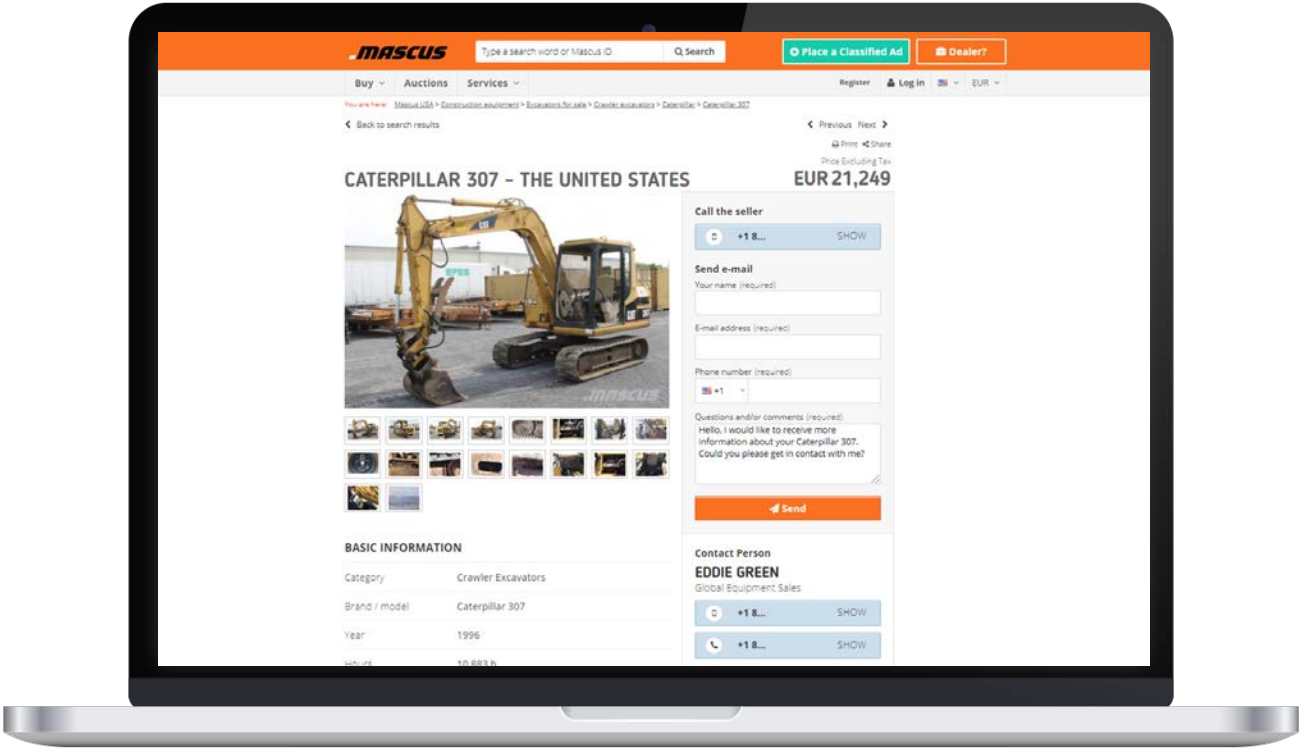
☑ Caterpillar CAT 307C rot...	2006	53 140	309	3 188	2013-09-01	SE	Show...
☑ Caterpillar CAT 307C SB ...	2007	53 320	110	3 713	2013-12-02	SE	Show...
☑ Caterpillar CAT 307C sve...	2006	45 920	23	3 197	2013-09-24	SE	Show...

Close

5. Object card



Setup trade-in (example)

Calculation

	Current period		Future period	
Valuation Date		2010-10-15	2011-04-15 (6 months	
Current meter		245 000 Km	+ 40 000 Km =	285 000 Km
Market value		**65 100**		**61 800**
Deprecation per hour/mile		0,27		
Sales margin	%	-		-0
Purchase price		**65 100**		**61 800**
Repair cost		- 150		- 150
Recondition cost		- 230		- 230
Real value		**64 720**		**61 420**

All prices in €

Capital adequacy

Trends & market analysis

We have a lot of data!

Construction

- 2017 exceeded sales expectations
- Higher demand vs. 2016
- OEMs order books full & production lines busy
- Lack of supply drives prices up for used equipment
- New technology drives sales
- New infrastructure boosts the market
- Stage 5 will affect the market during next year

Agriculture

- Industry mood reaches highest level since 2009
- Most markets experienced sales growth in 2017 with few exceptions, f.i. France
- Today, most OEMs have 3 months of productions booked ahead
- In 2018 the market may grow further, OEMs show confidence
- Two directions of agriculture is forming
    - Organic production with low production levels
    - Precision agriculture with high production levels

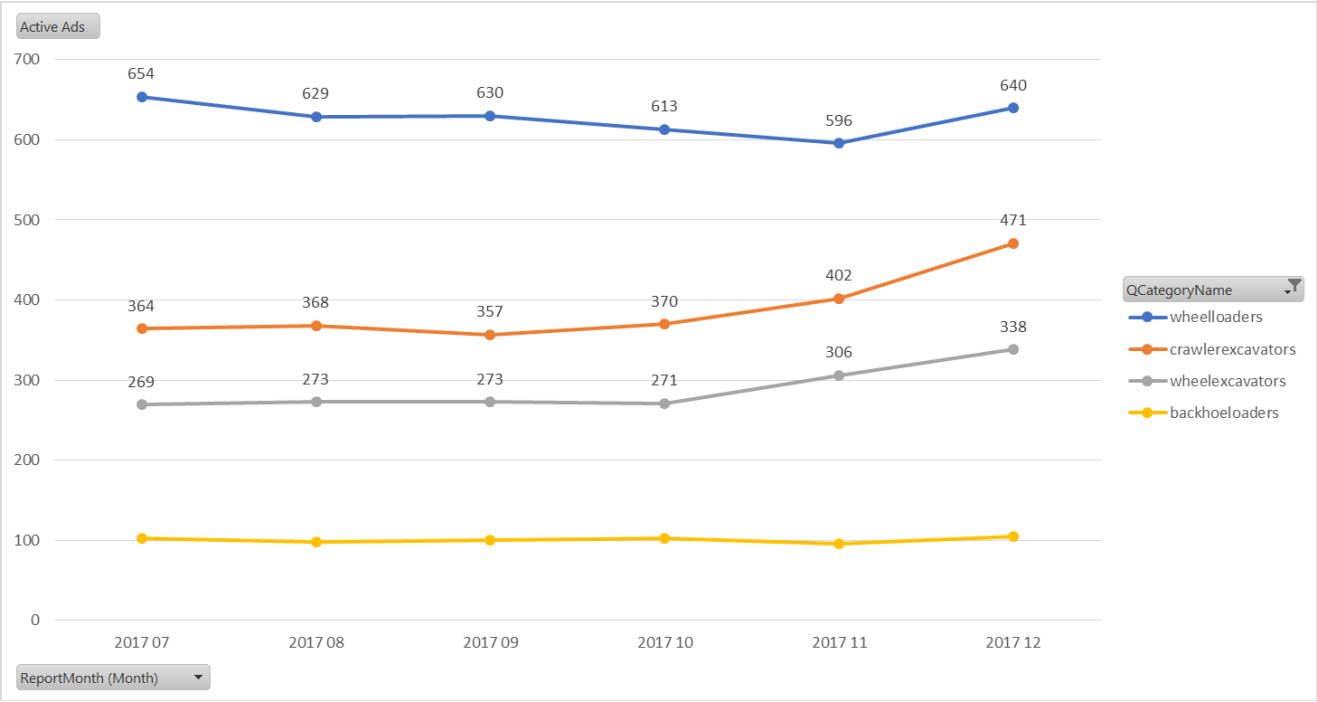
Transport & Material Handling

- Steady growth
- Both markets benefit from the good health in the construction sector
- Low stocks on used objects
- Trucks/Busses of Euro 5 or lower are dead as second hand objects
- Used refurbished forklifts as a new segment
- Rental business coming strong in both sectors

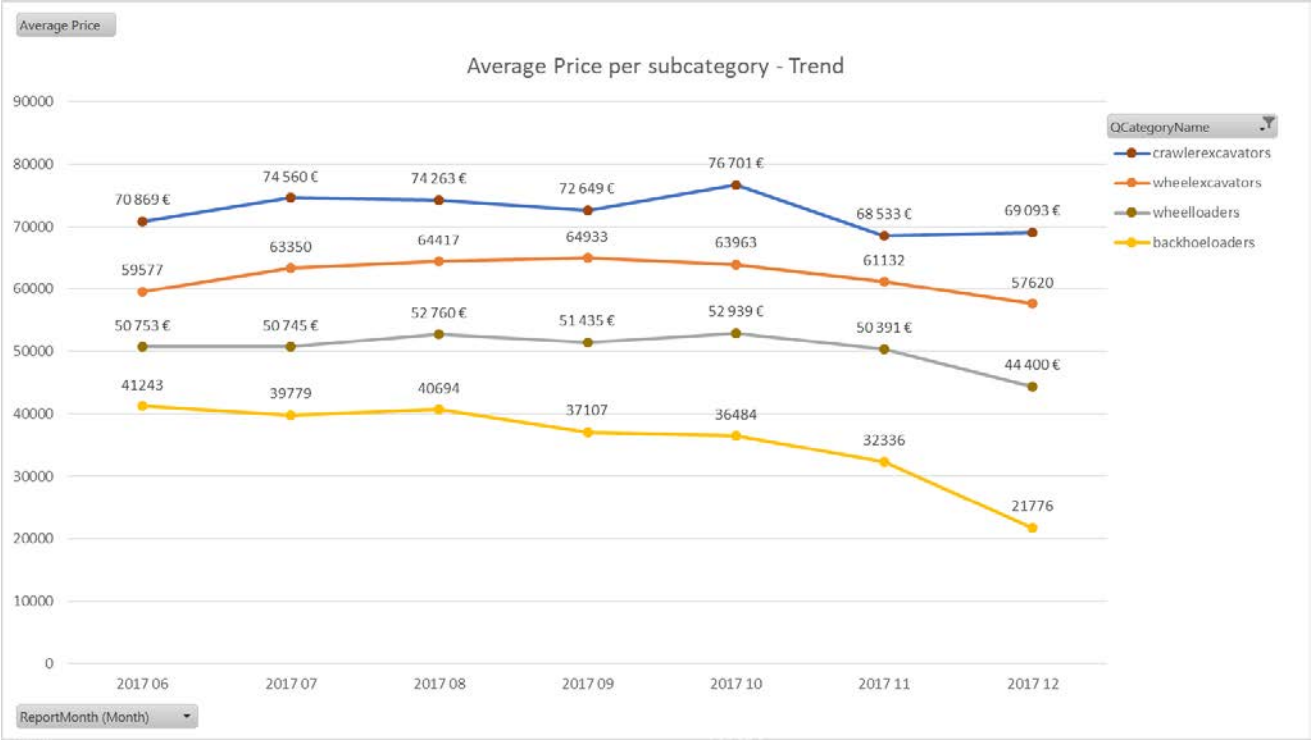
Machine tools

- Declining market since 2008
- New sales with high discounts
- Chinese machines flood the market (beware of issues)
- Manually operated machines still has a good market when used

Construction machines for sale



Average price in contruction machinery



Prognosis of future changes

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
4.1.1.1	70%	63%	56%	47%	45%	43%	37%	35%	33%	31%
4.1.2.1	74%	66%	63%	59%	54%	50%	42%	35%	30%	26%
4.1.2.2	77%	73%	62%	51%	41%	32%	30%	28%	26%	24%
4.1.2.3	75%	67%	61%	52%	42%	38%	37%	36%	35%	34%
4.1.3.1	75%	66%	55%	51%	45%	41%	39%	37%	35%	34%
4.1.3.2	76%	67%	59%	50%	44%	41%	39%	35%	31%	30%
4.1.3.3	73%	64%	54%	43%	38%	34%	29%	27%	25%	23%
4.1.4.1	74%	68%	55%	45%	44%	43%	35%	34%	33%	32%
4.1.4.2	75%	67%	64%	51%	44%	39%	35%	32%	31%	28%

Let’s build together a great collaboration

RITCHIE BROS.