

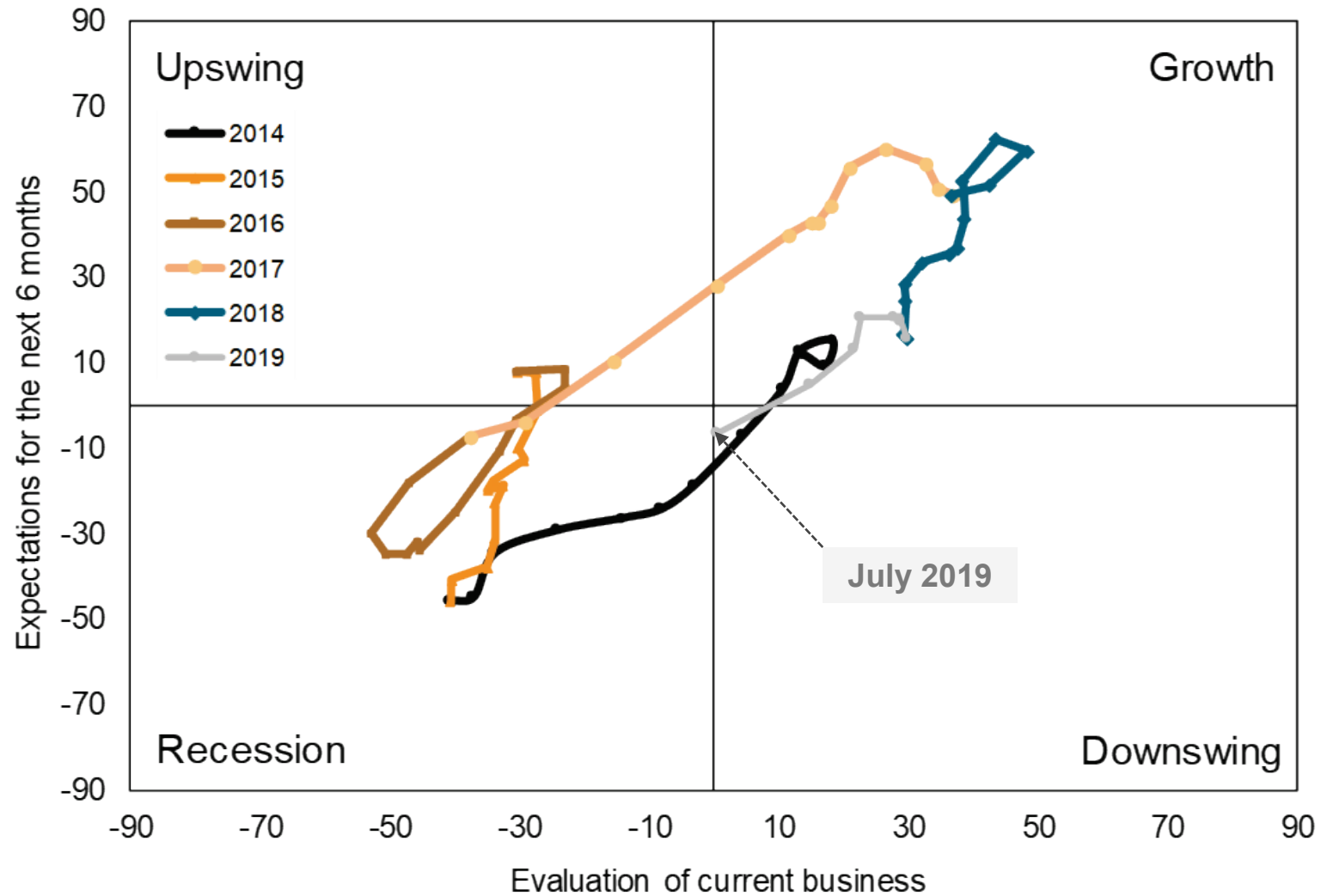
“What's going on right now in the global ag machinery markets?”

DLG/VDMA Press Conference
VDMA Information Exchange

Hanover, September 11th, 2019

Dr. Bernd Scherer
Managing Director
VDMA Agricultural Machinery Association

Business Climate experiences slowdown

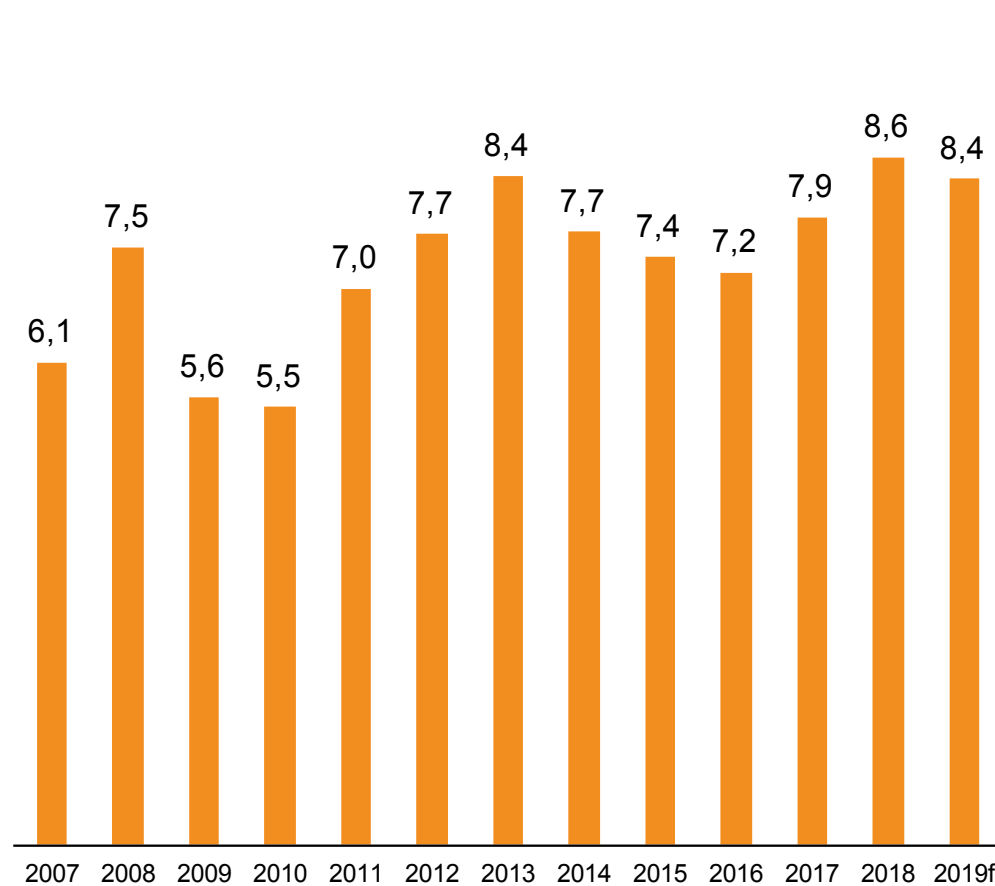


Source: CEMA Business Barometer, each value as an average of the last two month

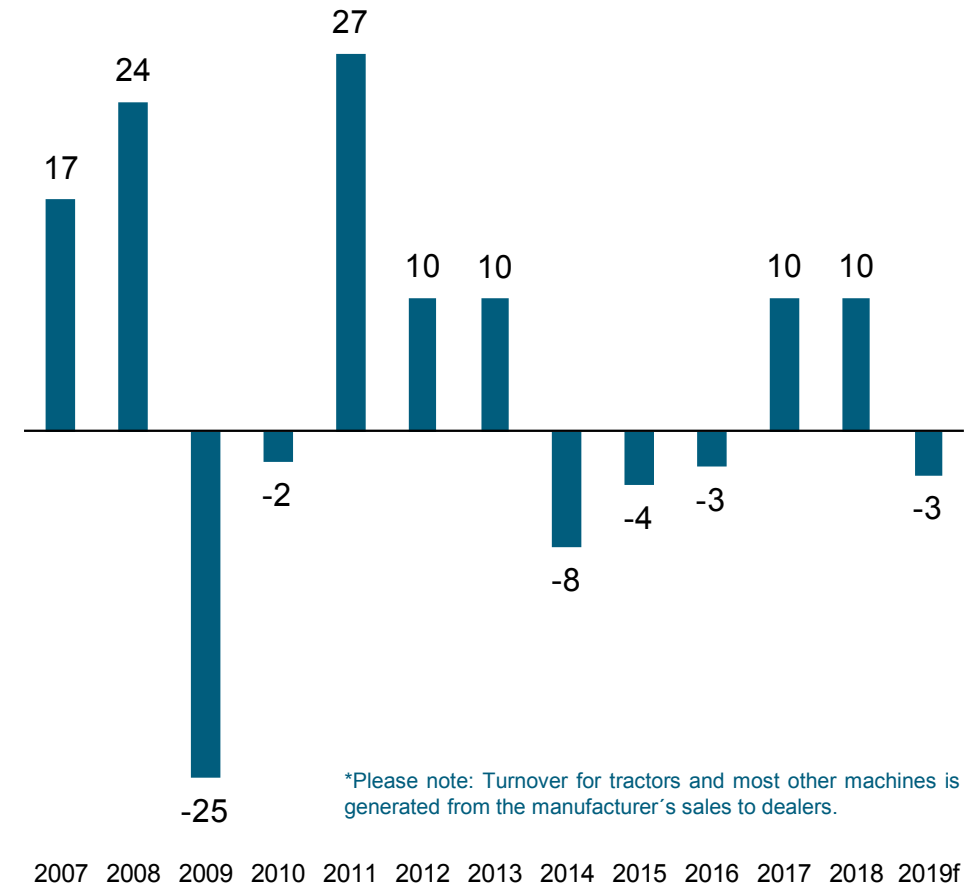
All-time high in previous year, currently weak order situation



Turnover in Bn. Euro



Nominal %-change



*Please note: Turnover for tractors and most other machines is generated from the manufacturer's sales to dealers.

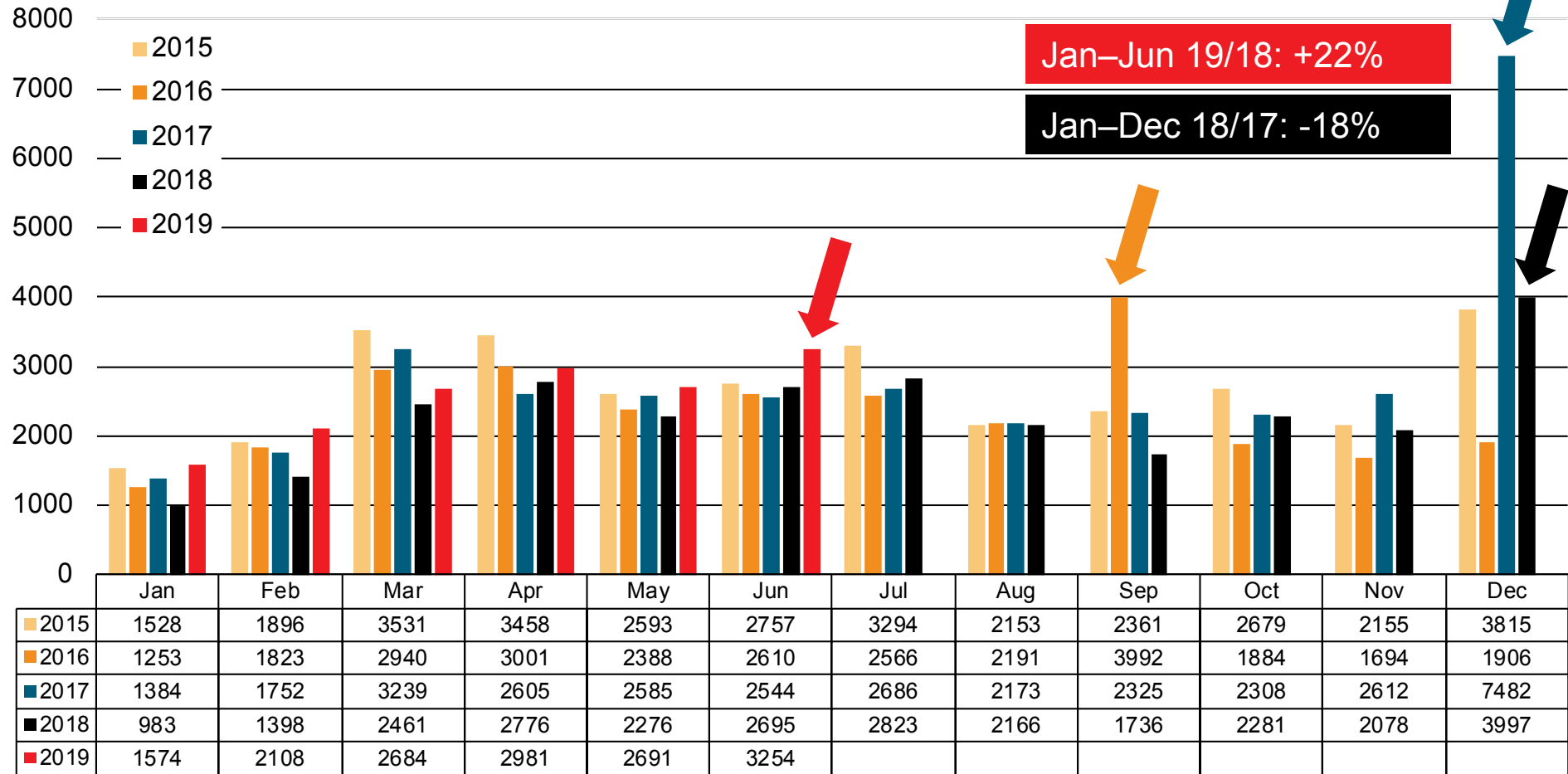
Source: VDMA Agricultural Machinery Association, production in Germany, status: July 2019

%-change

Special effects lead to decoupling of dealer and retail sales



New Registrations of Tractors in Germany (in units, total over all hp segments*)

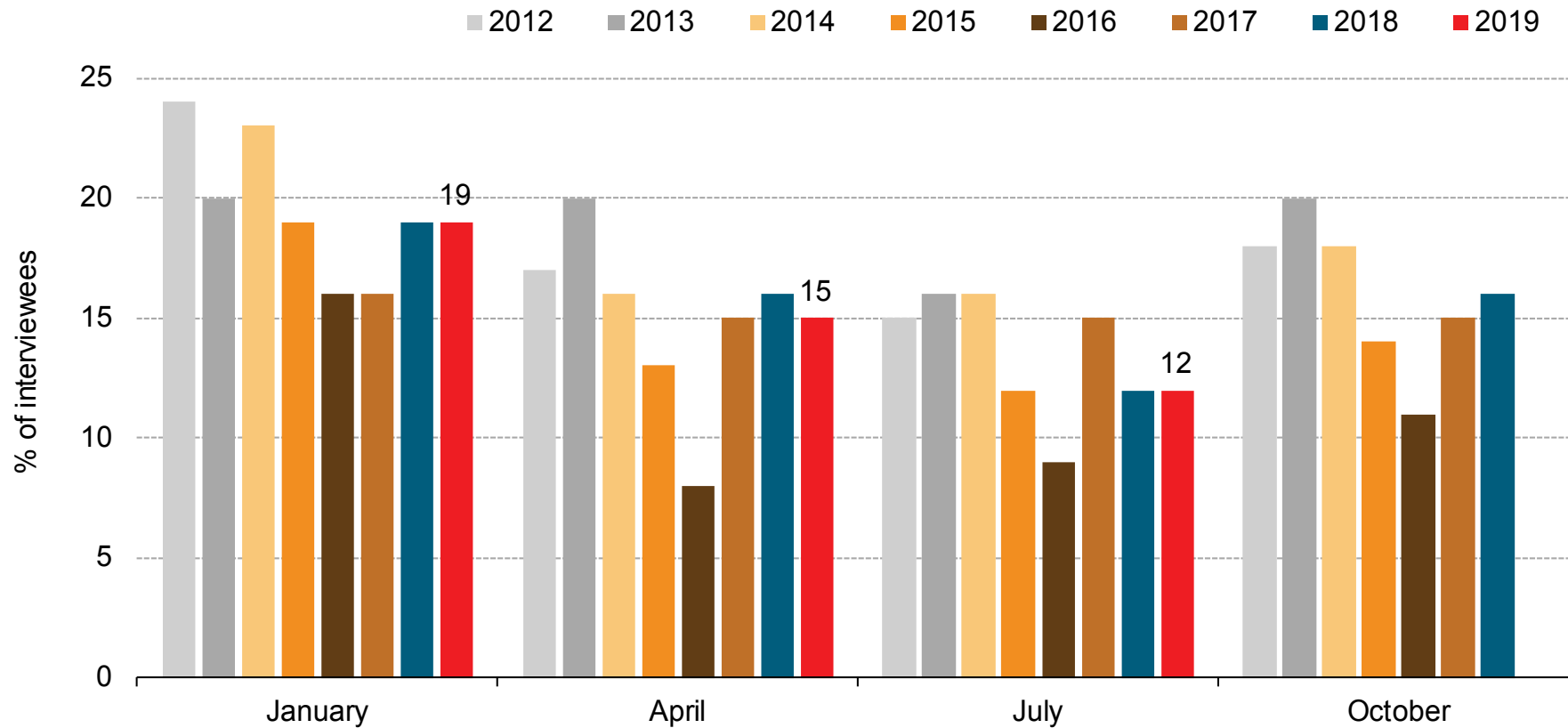


Source: KBA * excluding ATVs and telescopic handlers, since 2016 without municipal tractors

Farmers still willing to invest



Share of agricultural holdings in Germany with investment plans for agricultural machinery (for half year ahead)

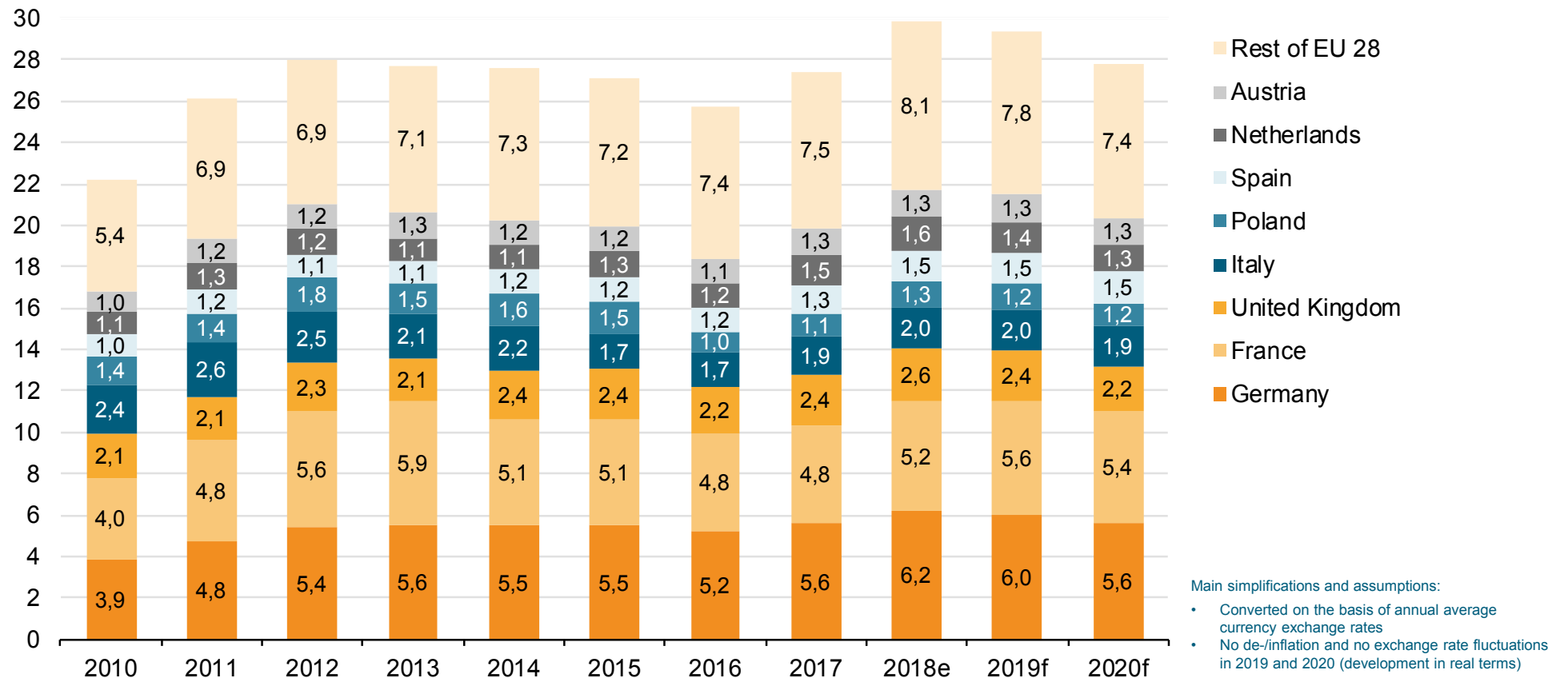


Source: VDMA - Agricultural Business Barometer

Market slowdown in Europe with the exception of France



Market Volumes in Billion Euro



Main simplifications and assumptions:

- Converted on the basis of annual average currency exchange rates
- No de-inflation and no exchange rate fluctuations in 2019 and 2020 (development in real terms)

Source: VDMA (status July 2019)

World market stable – with individual outliers



Market Volume Development in **real terms**
(converted into local currencies and deflated)

	2015	2016	2017	2018e	2019f	2020f
	%-change	%-change	%-change	%-change	Trend	Trend
World	-7	-1	4	3	0	-2
EU	-2	-4	6	7	-2	-5
NAFTA	-16	-5	1	9	⇒	⇩
China	2	-4	4	-11	⇩	⇒
South America	-15	4	7	9	⇩	⇩
India	-22	18	15	21	⇩	⇒
Russia	-20	24	14	-3	⇒	⇩
Japan	-9	-5	-2	3	⇩	⇒
Turkey	14	-5	-1	-41	⇩	⇒

Legend:

↑	> +10%
⇩	+4/+10%
⇒	+/- 3%
⇩	-4/-10%
↓	> -10%

Main simplifications and assumptions:

- Converted on the basis of annual average inflation and currency exchange rates
- No de-/inflation and no exchange rate fluctuations in 2019 and 2020 (development in real terms)
- The non-considered rest of the World in 2019 and 2020 with the same development in real terms like the (on market volume shares) weighted average of the regions under consideration

Source: VDMA (status August 2019)

Output upwards, emissions downwards – Research project “EKoTech” proves industry's top performance

- **German Federal Ministry of Agriculture supports large-scale research project on fuel efficiency**
 - Actors: industry, science, associations
 - Approach: technologically open and holistic
 - Volume and duration: > EUR 5 million; 2016-2019
- **significant fuel savings in the double-digit percentage range demonstrable**
- **3+1 efficiency levels**
 - machine efficiency
 - process efficiency
 - operator efficiency
 - *Plus future field: "Alternative fuels"*

Output upwards, emissions downwards – Research project “EKoTech” proves industry's top performance



Project results "Efficient fuel use in ag machinery" (EKoTech)

Agritechnica 2019 – 11 November, Convention Center (CC)

14.00 to 16.00

CC, Room 3B

EKoTech Symposium

Presentation of the project results and recommendations for action for agriculture, industry and politics

16.30 to 17.30

CC, Room 17

EKoTech Press Conference

Questions, Answers and Conclusions