FOTC 2014

Fertilizer Outlook & Technology Conference

MAKING THE RIGHT MOVES

OUR CHALLENGES, OUR IMAGE, OUR FUTURE

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Nitrogen Outlook

The Fertilizer Institute
Nourish, Replenish, Grow

Fertilizer Industry Round Table

THE INDEPENDENT AUTHORITY
MINING | METALS | FERTILIZERS

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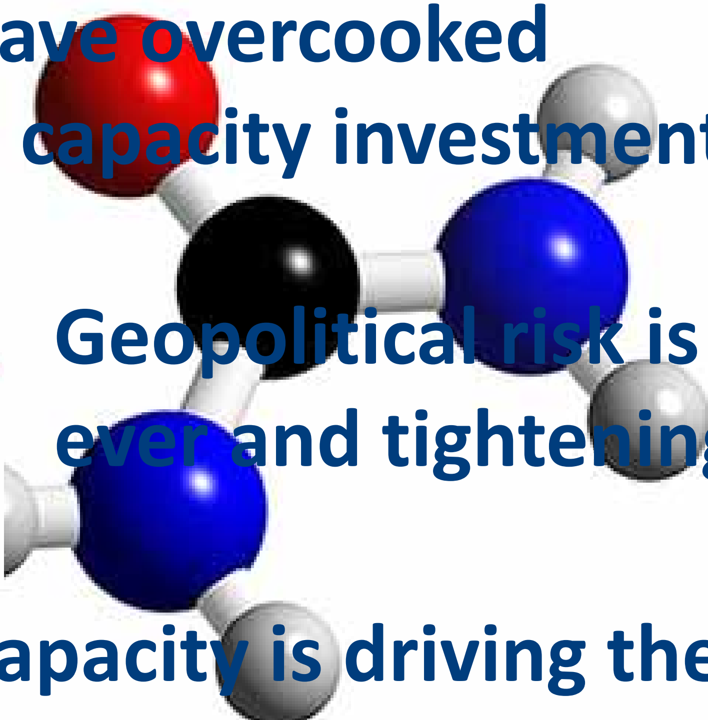
TFI Savannah ‘14 November 19th 2014

Presentation Structure

Strong demand fundamentals underpin nitrogen market, but...

...producers have overcooked medium-term capacity investment.

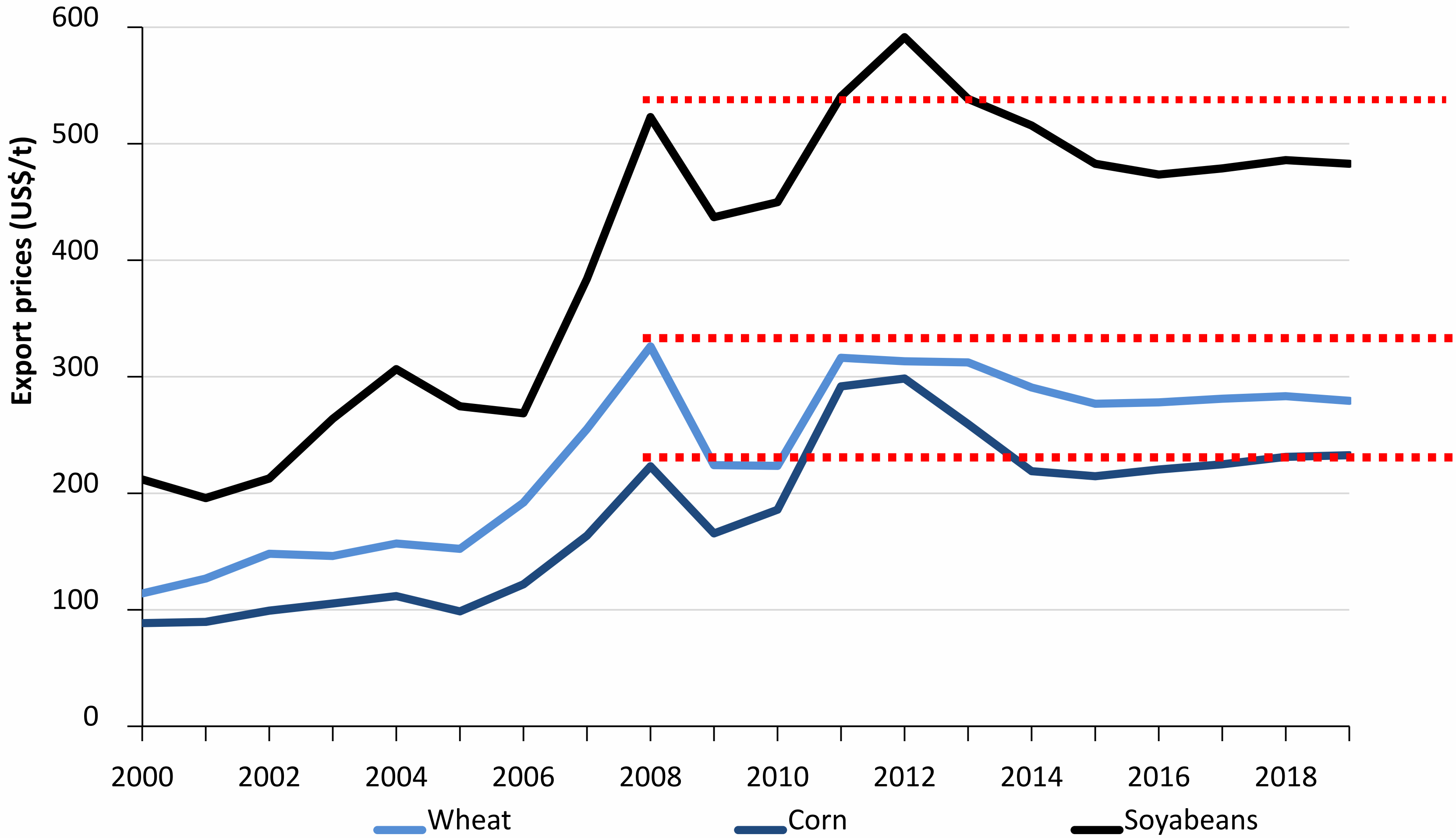


Geopolitical risk is higher than ever and tightening markets.

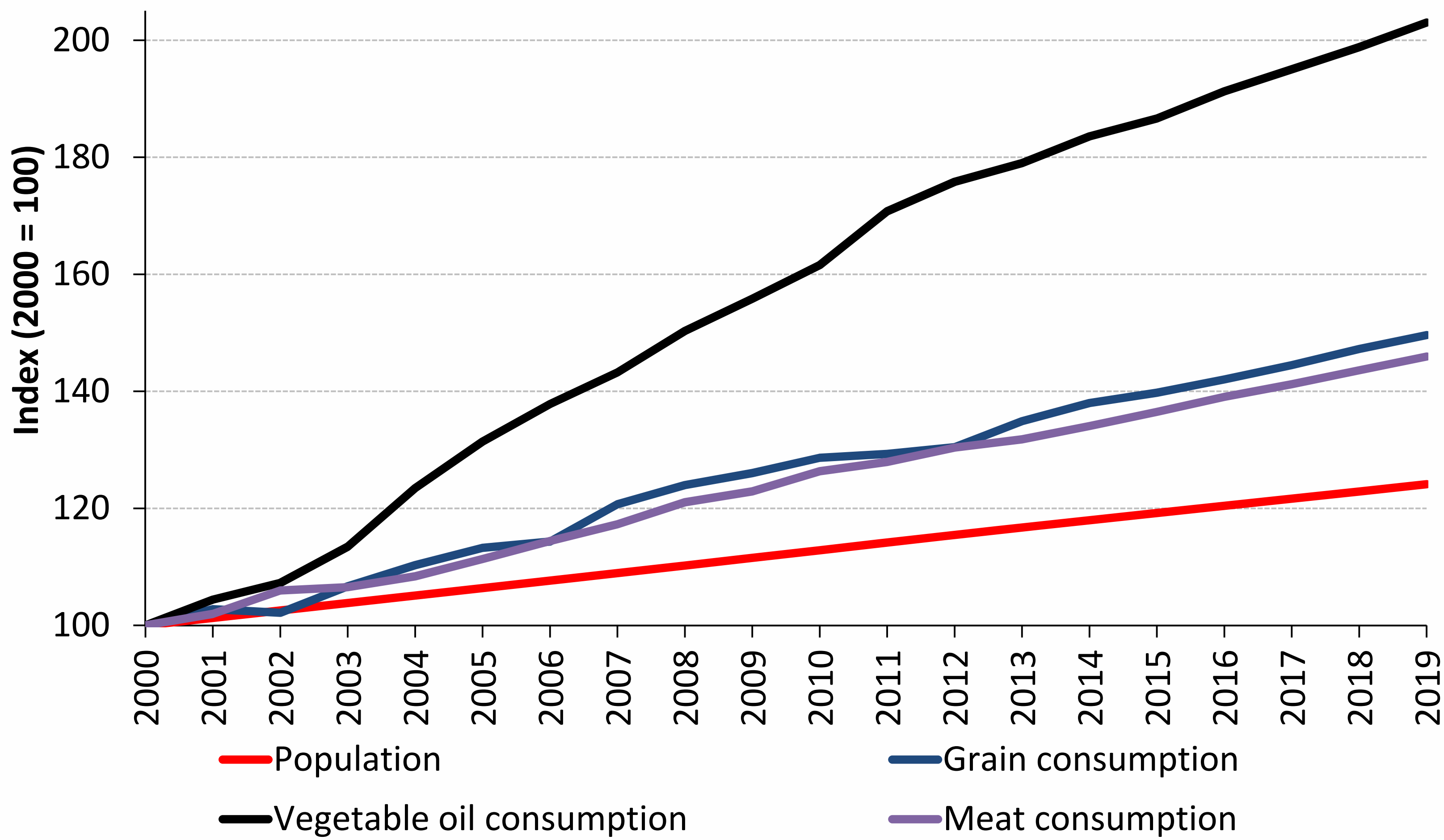
China’s huge capacity is driving the global nitrogen market. For now.

Demand-side fundamentals

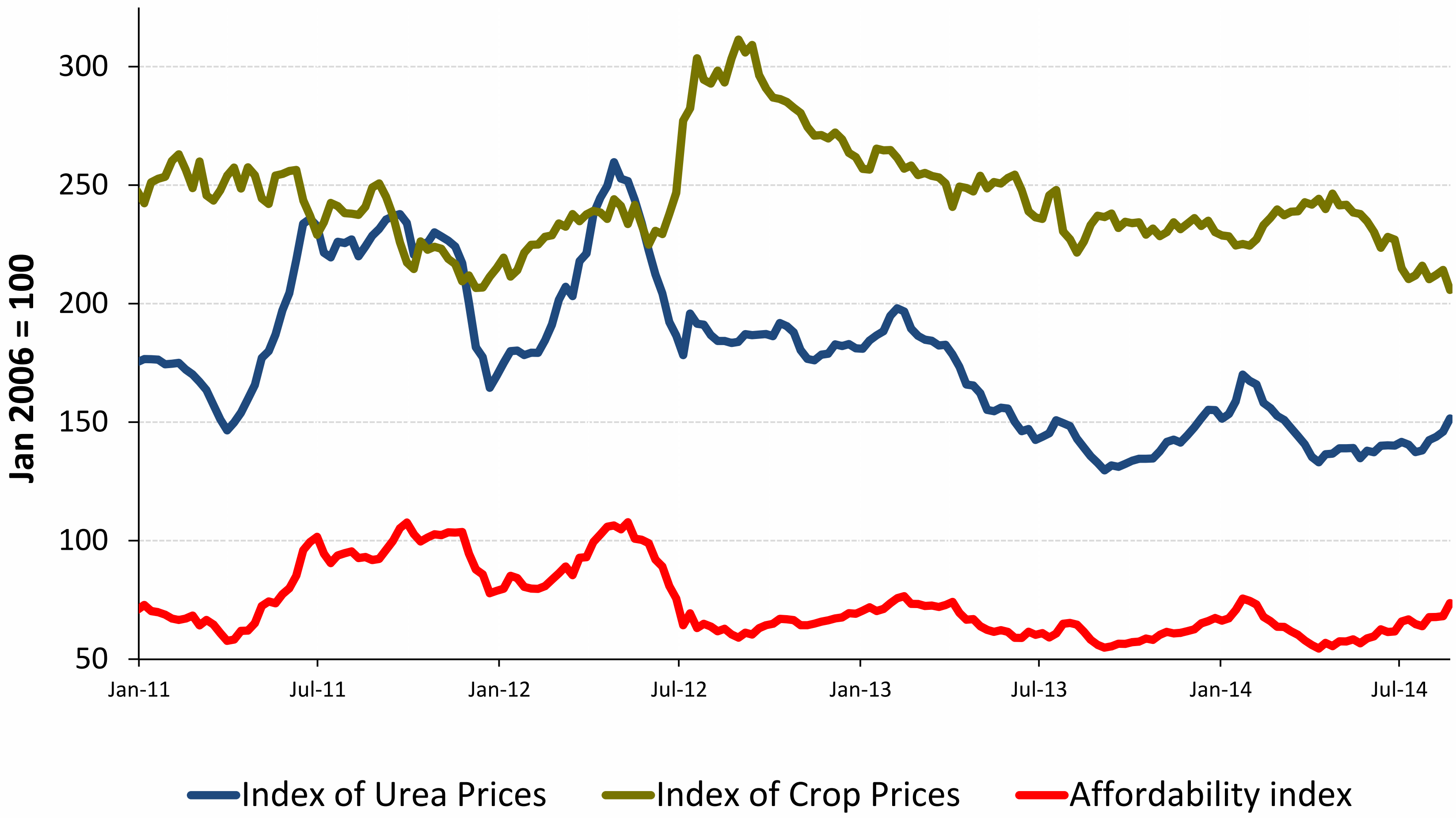
Crop prices stabilise; medium-term gains likely



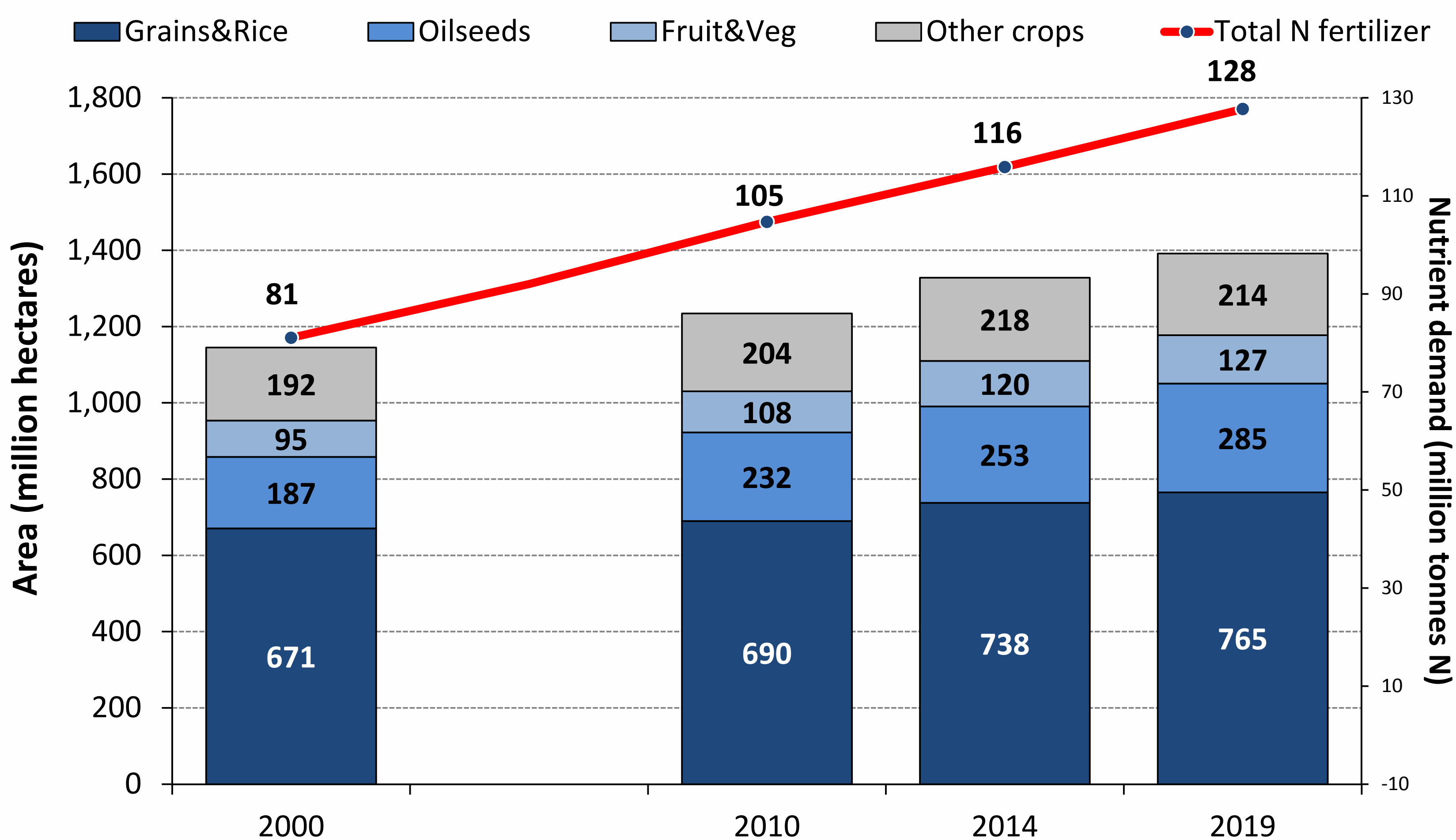
Population and macro economy support crop acres



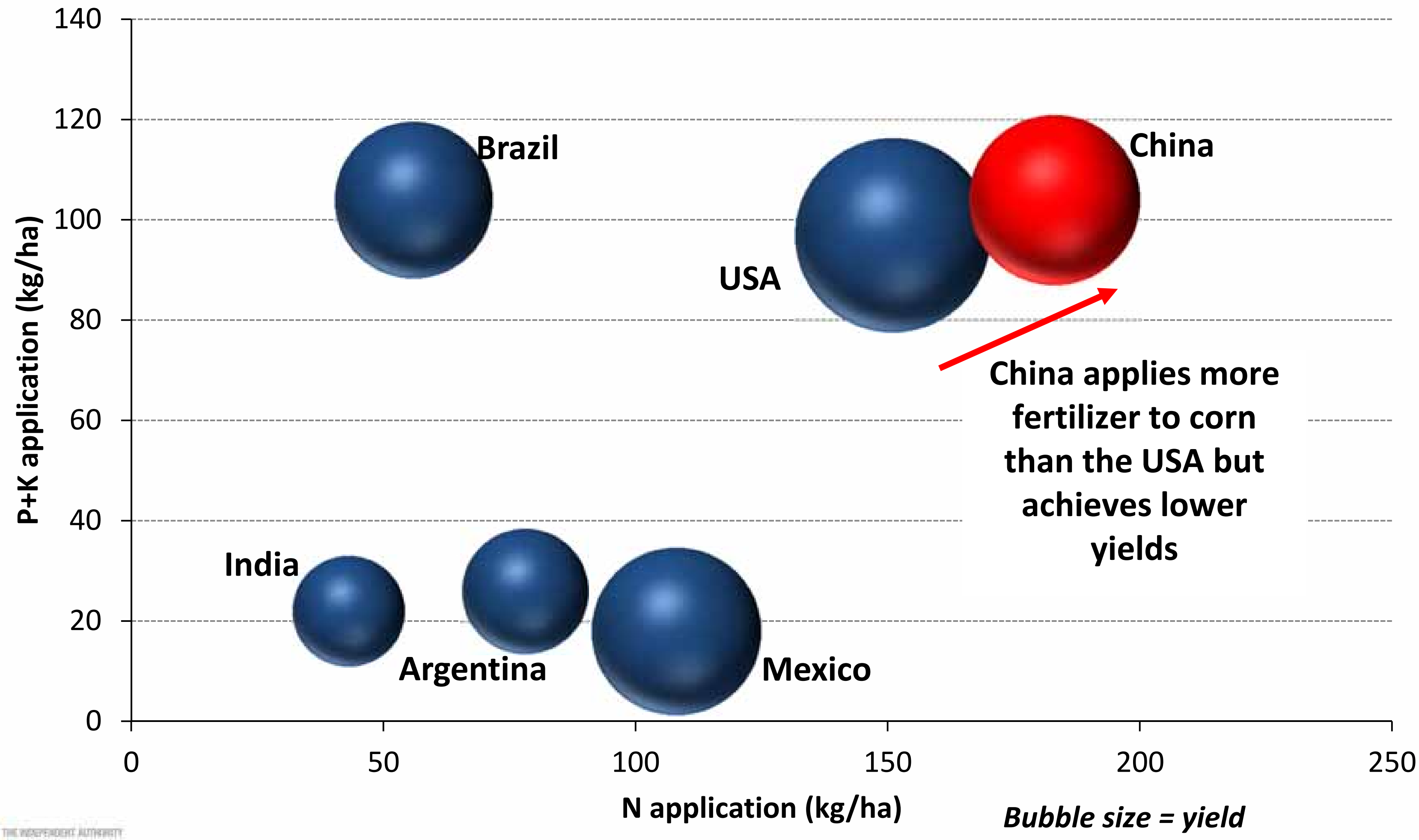
This has also been supported by N affordability



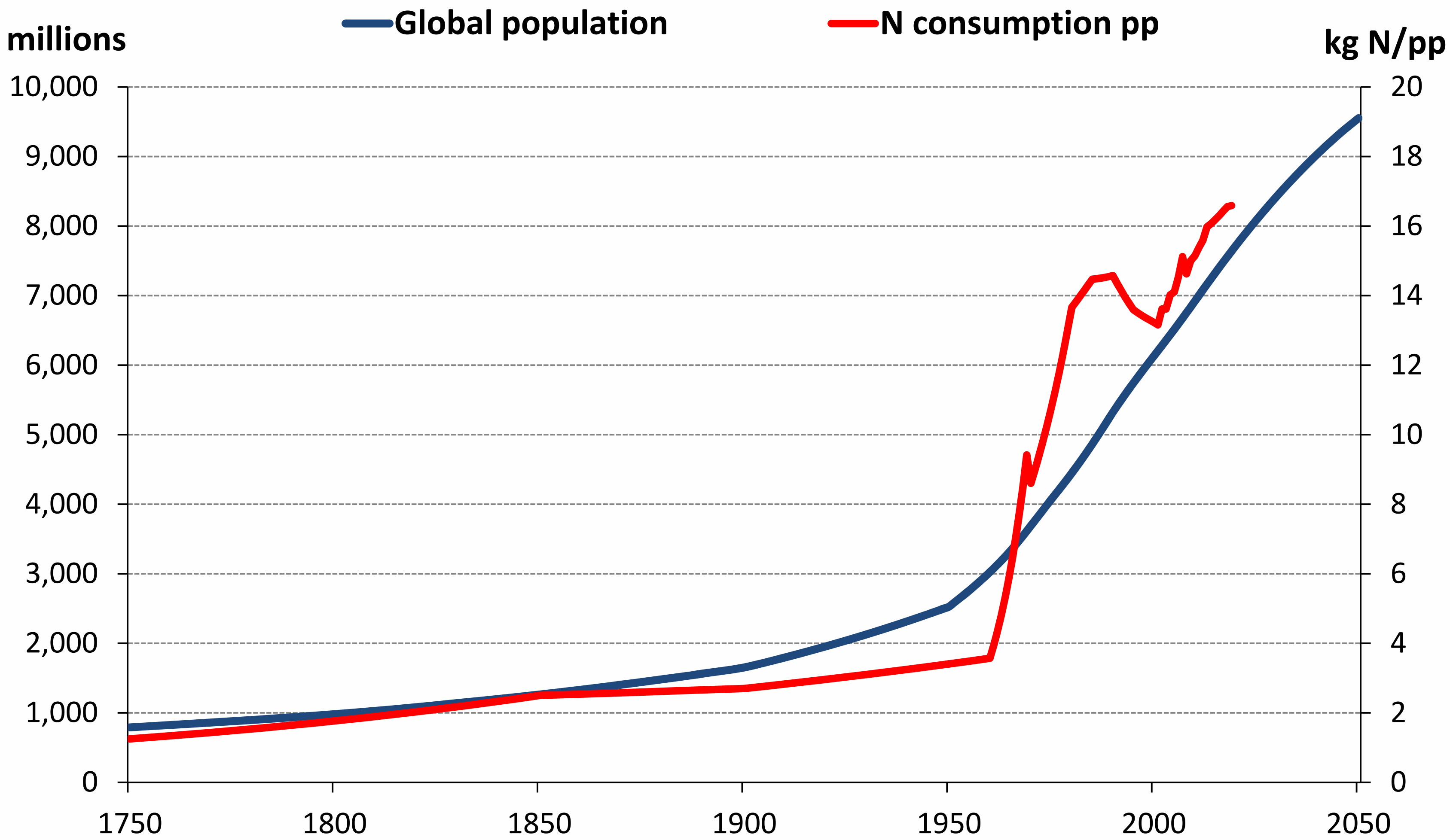
Driving crop areas and higher application rates



China over-applies N, while others under-apply

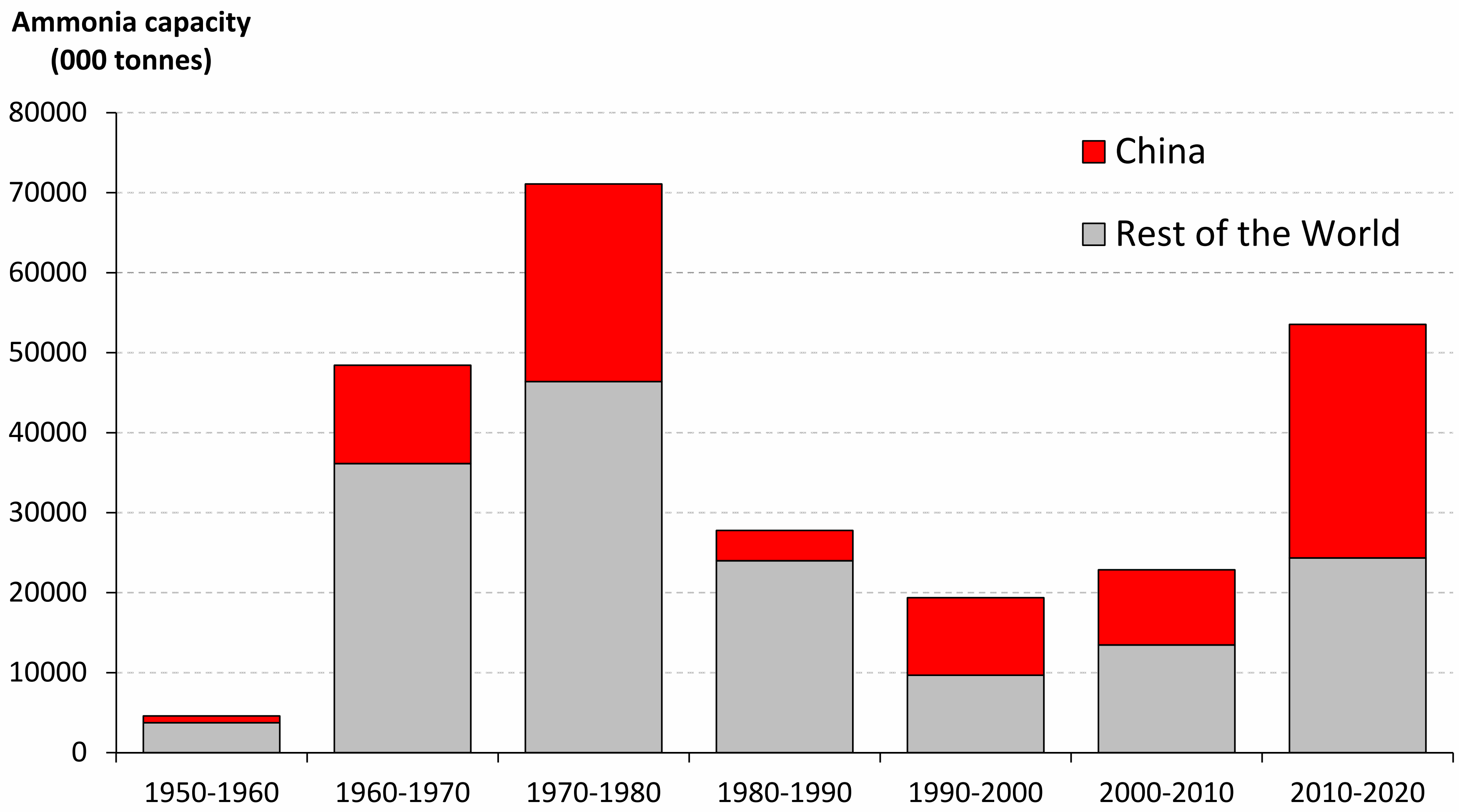


Population will continue driving N consumption



Overcooked supply

More capacity built this decade than previous 25yrs



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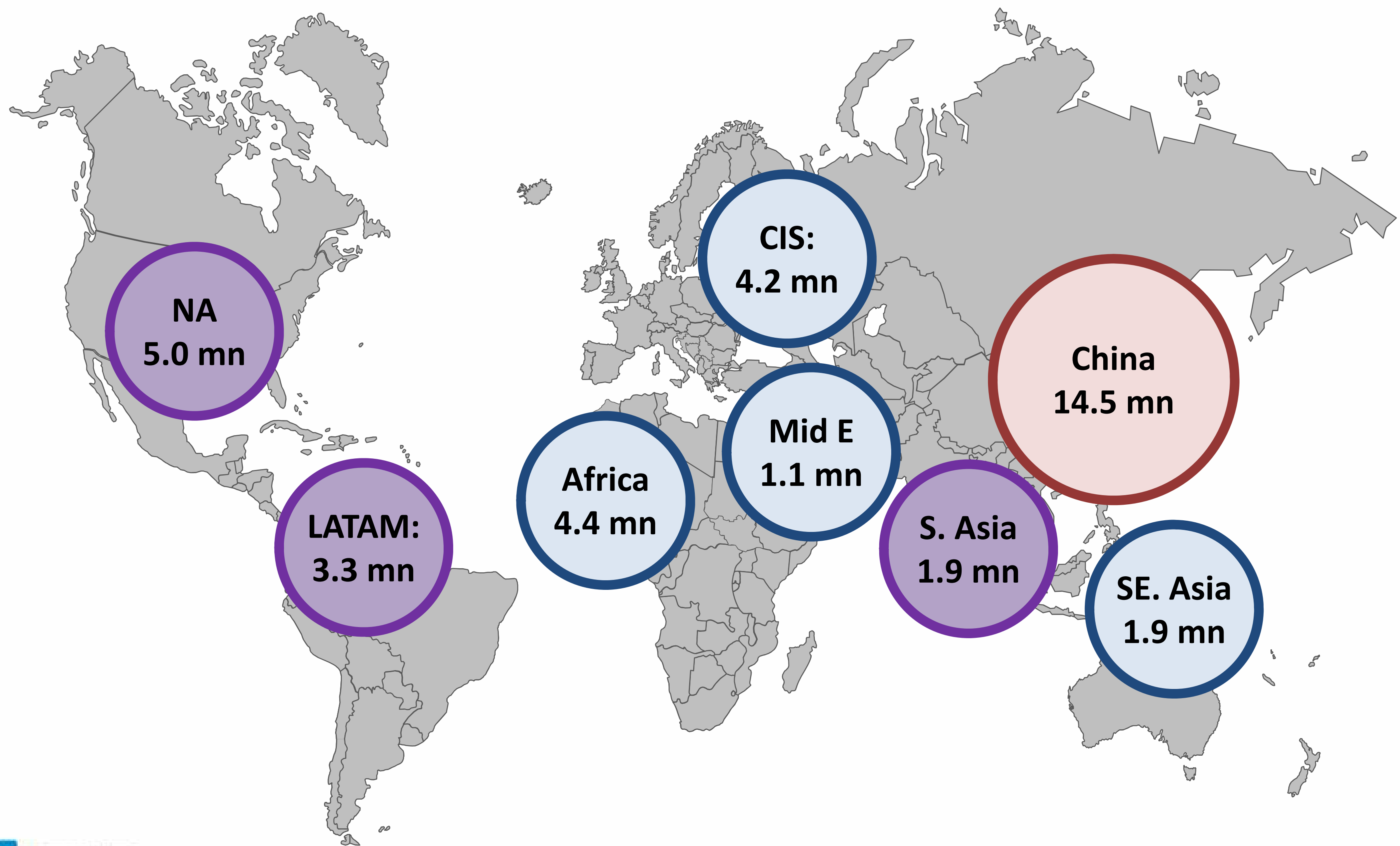
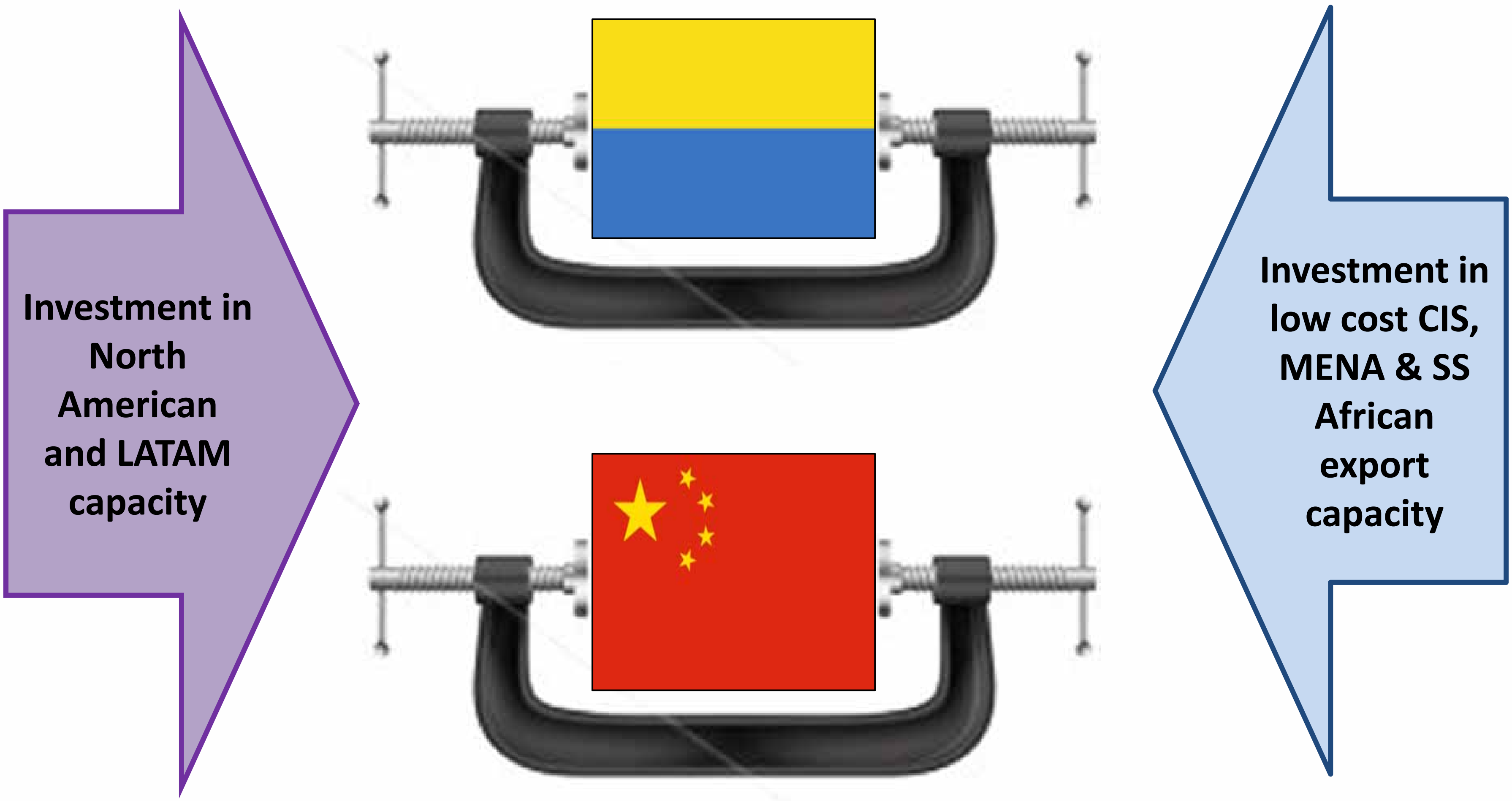
Urea supply additions: Today to 2019



Investment lowers trade & hurts marginal supply

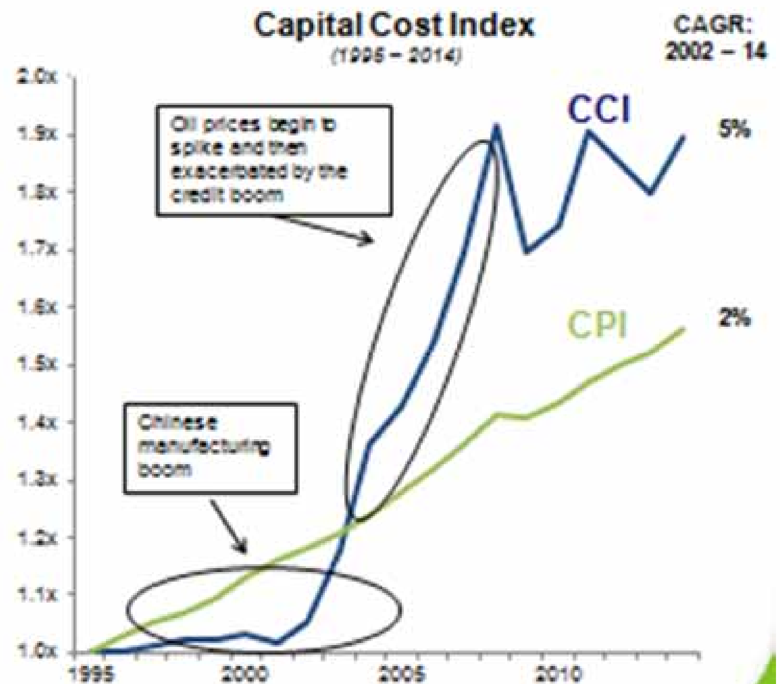


Weak prices have slowed building, so has inflation

Cumulative Capital Cost Index for Nitrogen Plants

CFIndustries

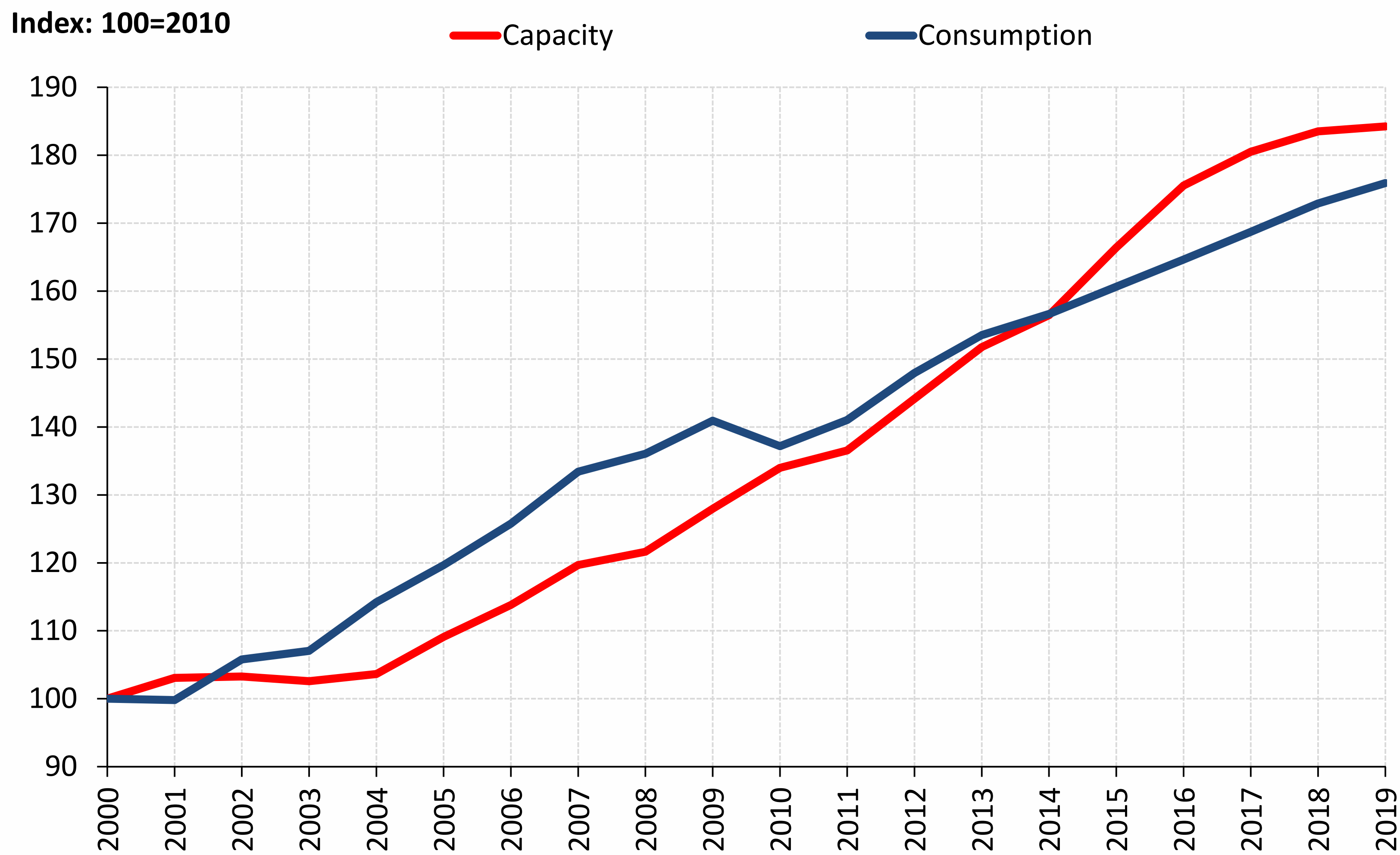
- Capital cost escalation has resulted in costlier investments for new nitrogen projects
- Since 1995, the CCI has outpaced the consumer price index (CPI) by ~1% each year. However, since 2010 the CCI and the CPI have grown at the same pace by ~2% each year
- Port Neal:
  - 2002: ~$1.0 billion
  - 2012: $1.7 billion
  - 2014: ~$2.0 billion



Note: The CCI is calculated using a blend of the chemical engineering plant cost index modified by USD/Euro exchange rate.

Source: Bureau of Labor Statistics, CF Industries

Urea capacity growth is now outstripping demand



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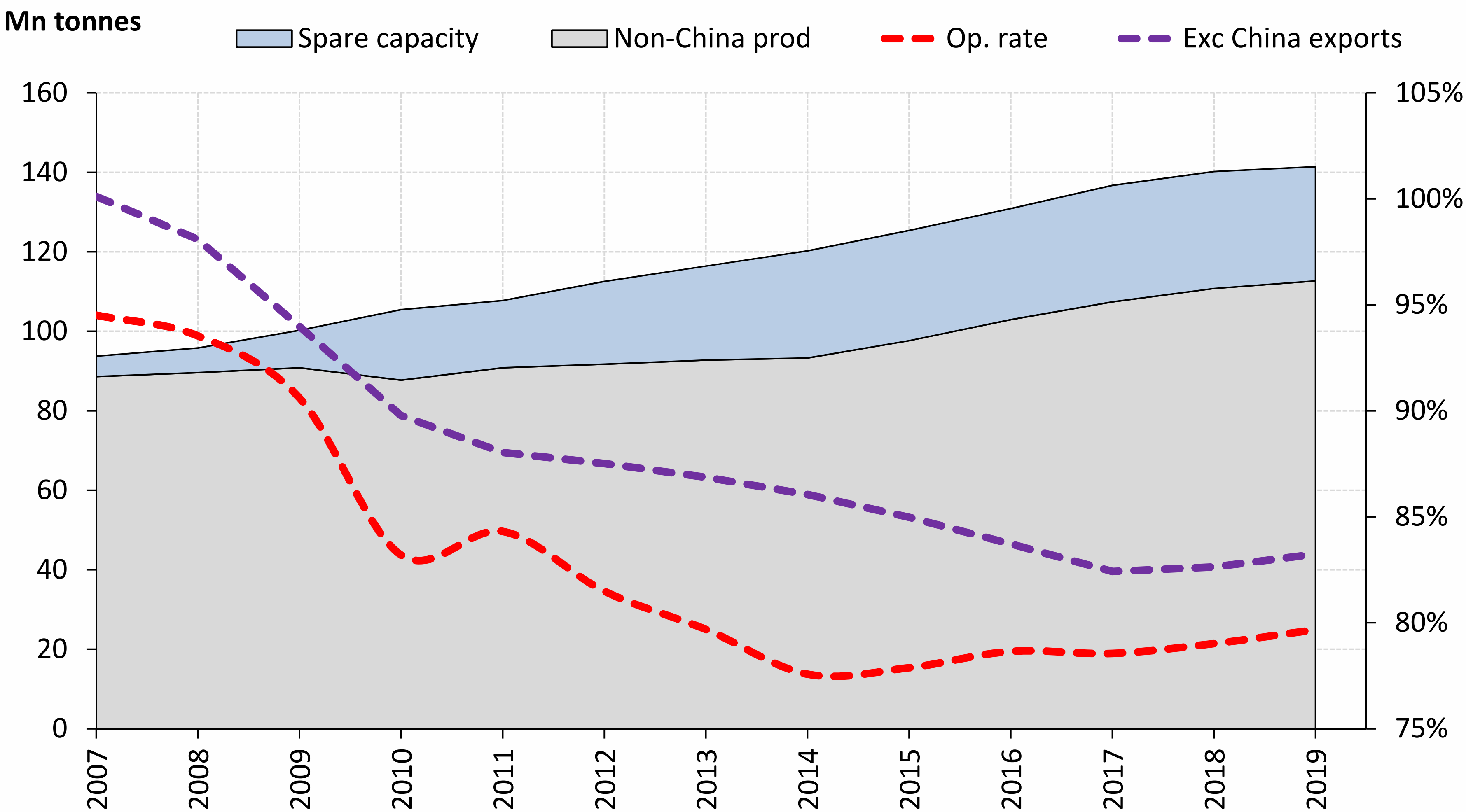
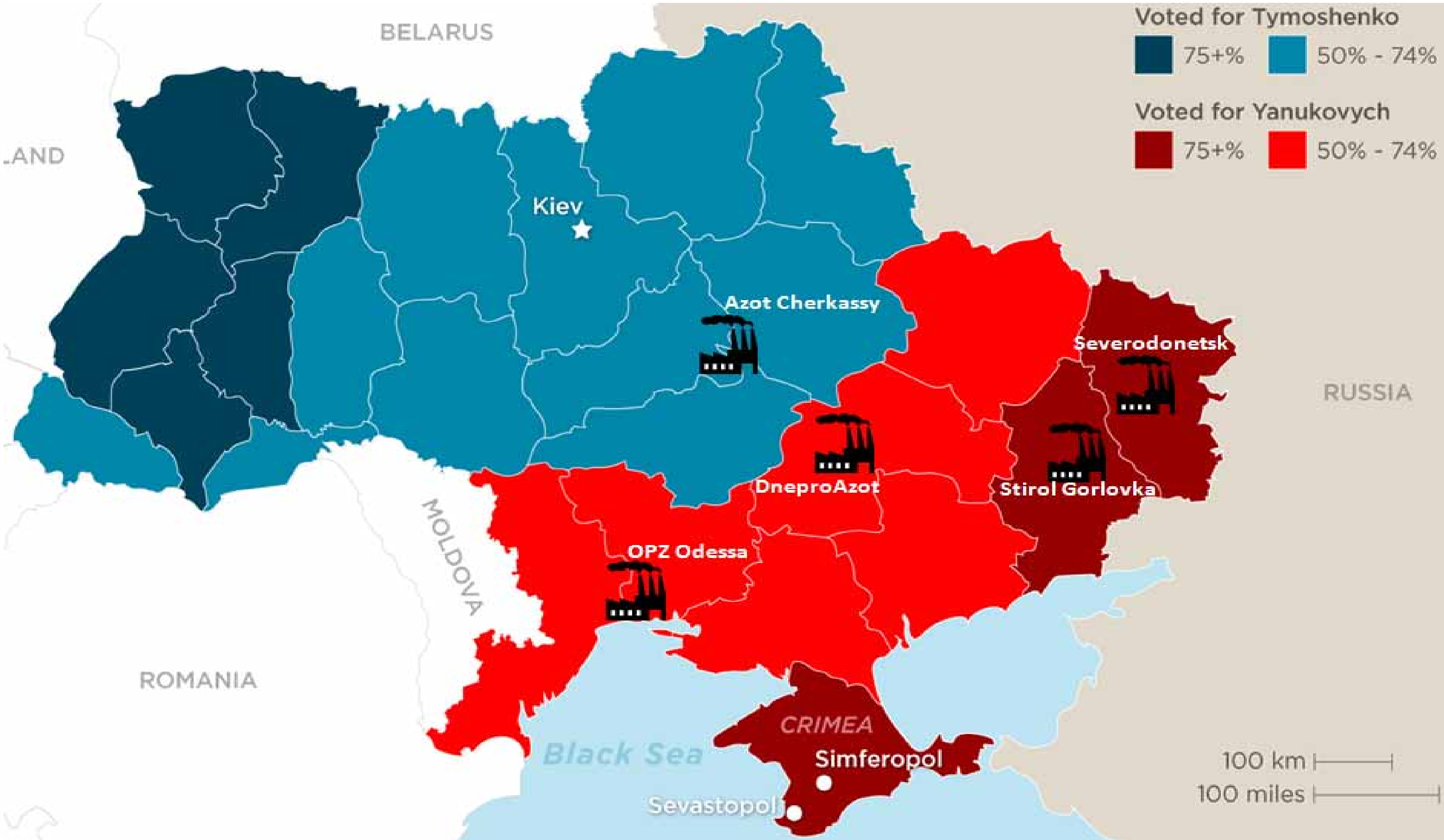
However, the result is a forecast of low op rates



Supply disruptions

Physical disruptions in Ukraine tighten ammonia



Urea availability fallen to 40% (100kt/m).
Ammonia down to 25% (25-30kt/m)

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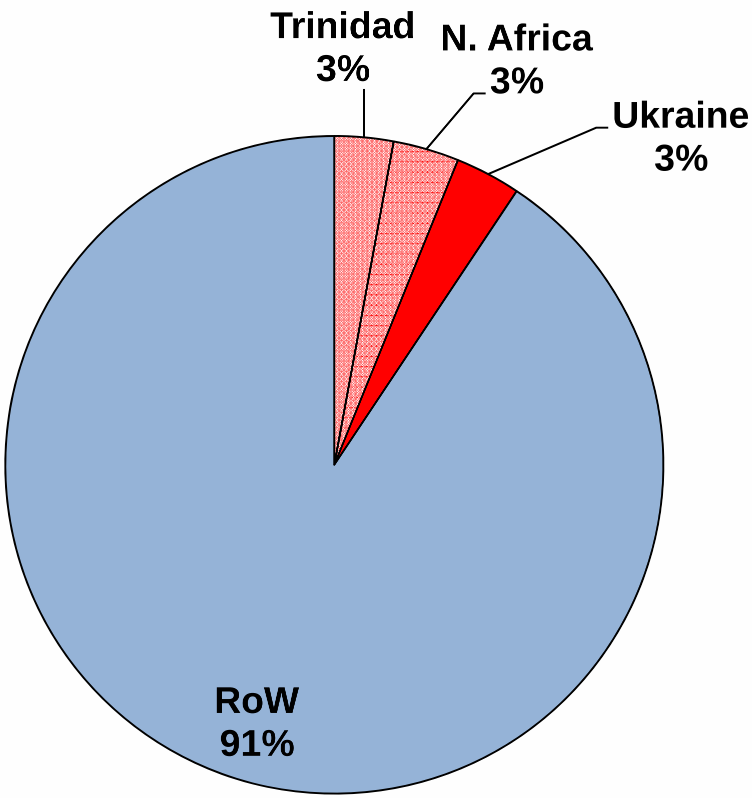
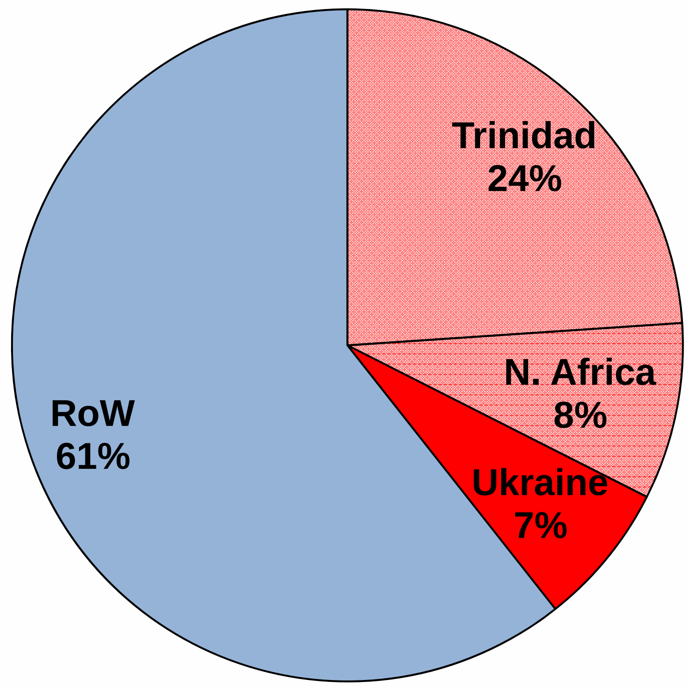
At-risk tonnage in the merchant ammonia market

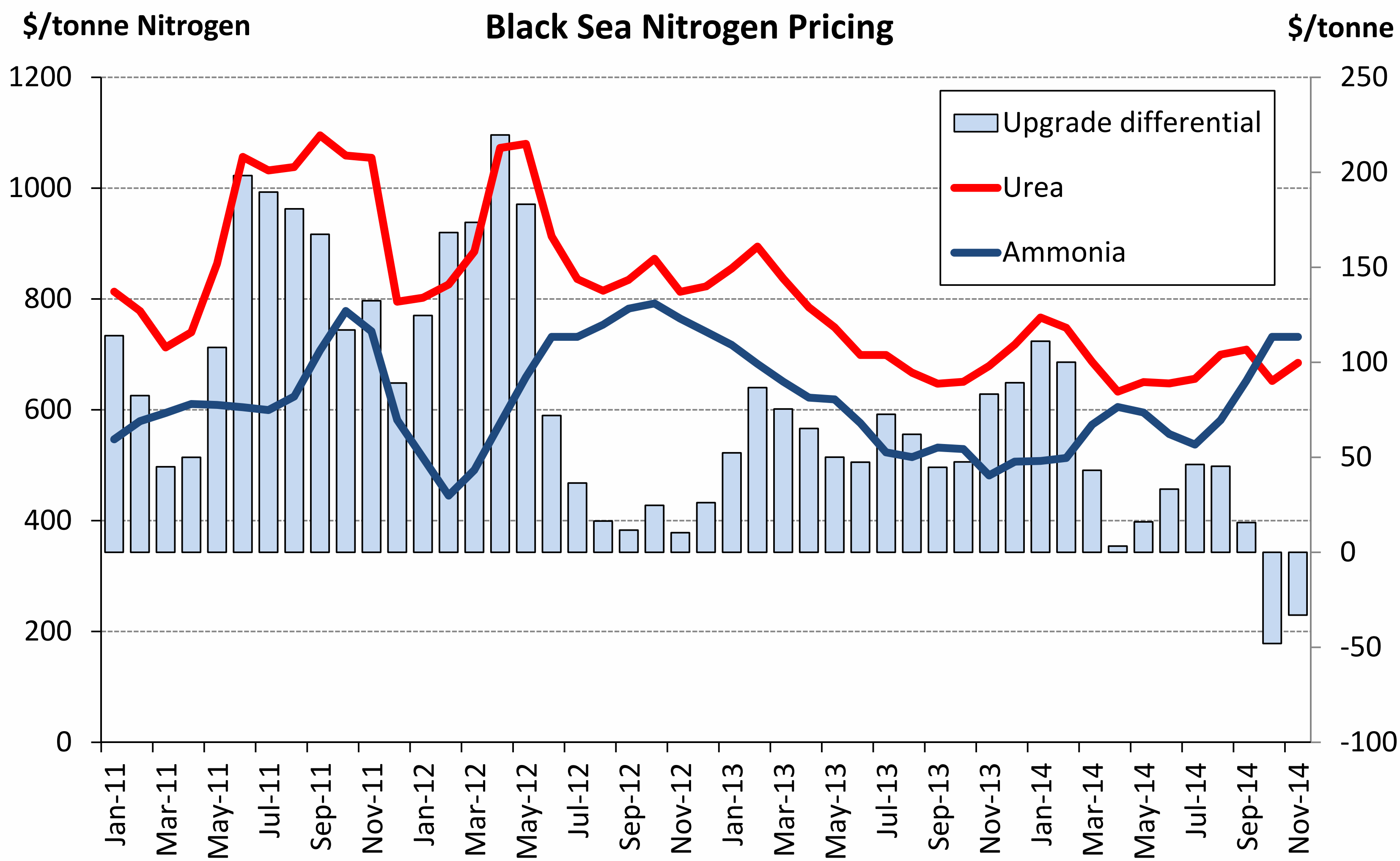


Global Ammonia capacity = ~200 million t/y



Traded Ammonia Market = 19-20 million t/y

Urea now worth less than the value of its ammonia

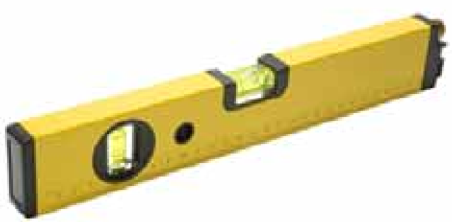


China driving the market

Pressure is growing for more liberalisation

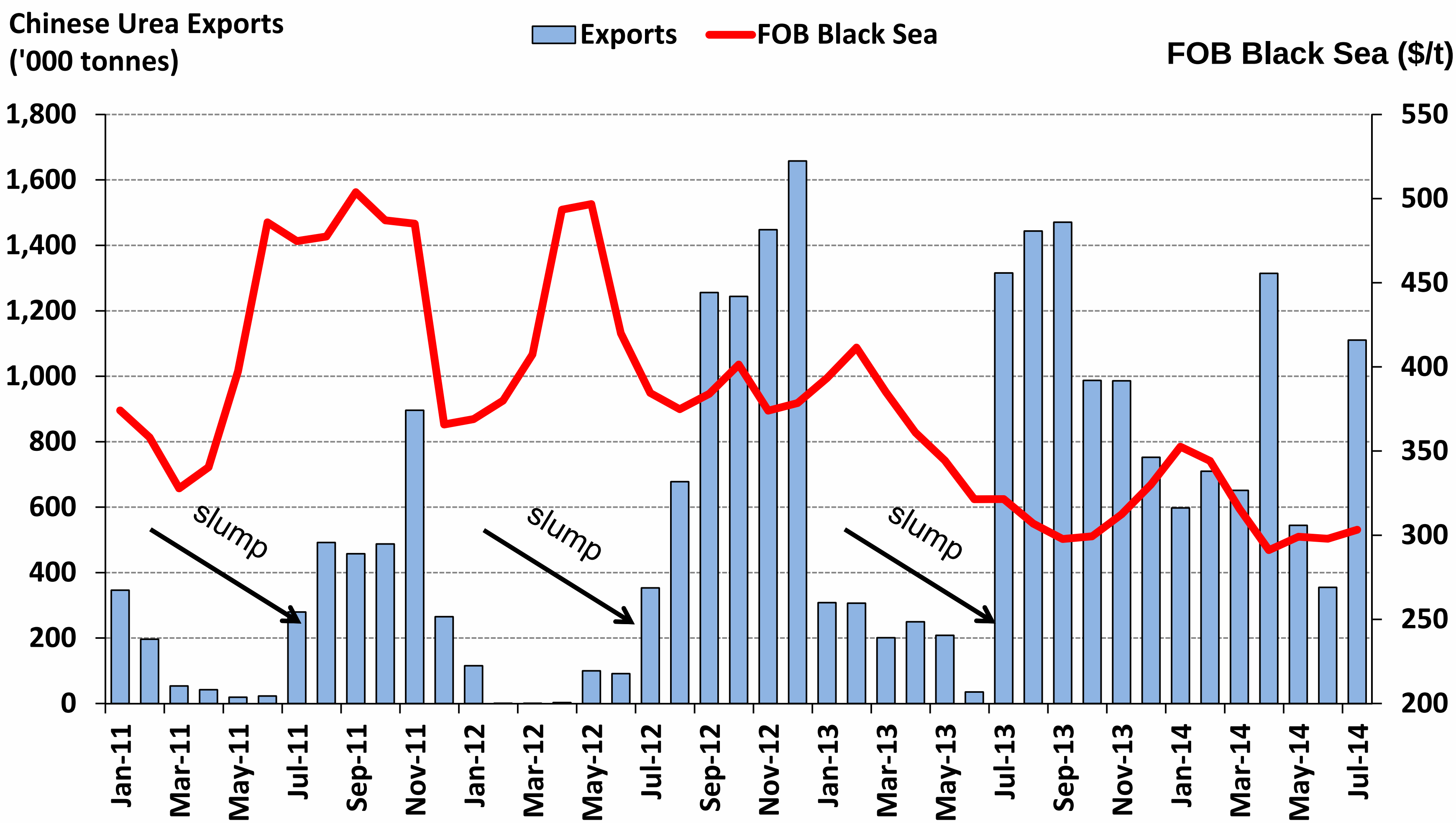
•Originally implemented in 2005 to decouple the domestic agricultural market from international prices

•As Chinese urea capacity expanded, the export duty has revised down; in 2014 high season = RMB40 +15%, while low = RMB40



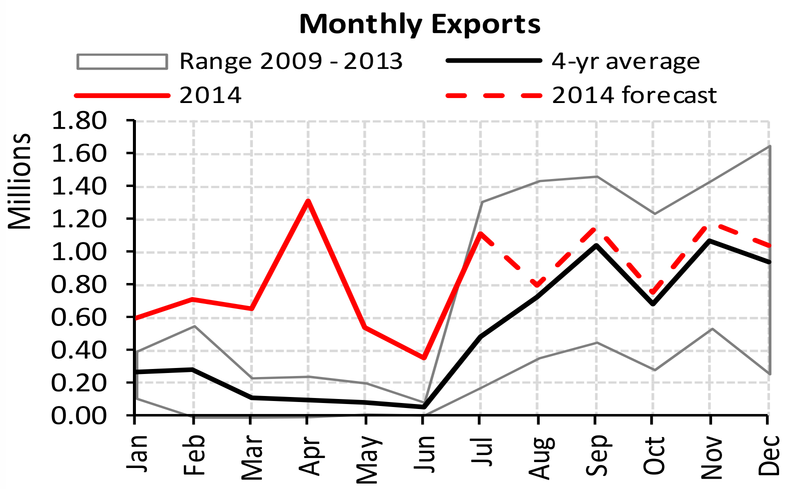
•This is still market distorting with inventorying and warehousing tactics weighing on the low-season

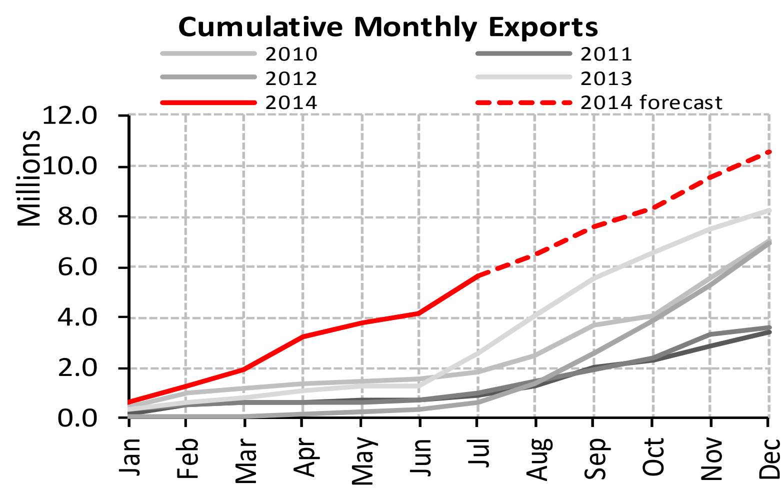
Capacity and liberal export policy boost China's role

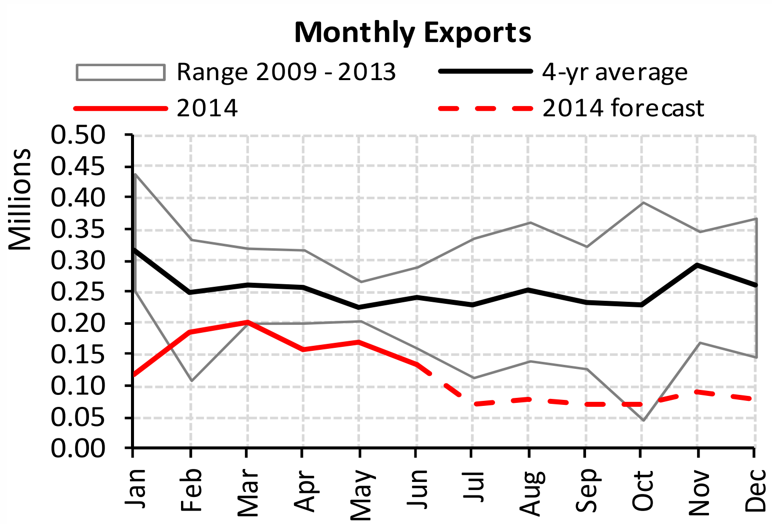


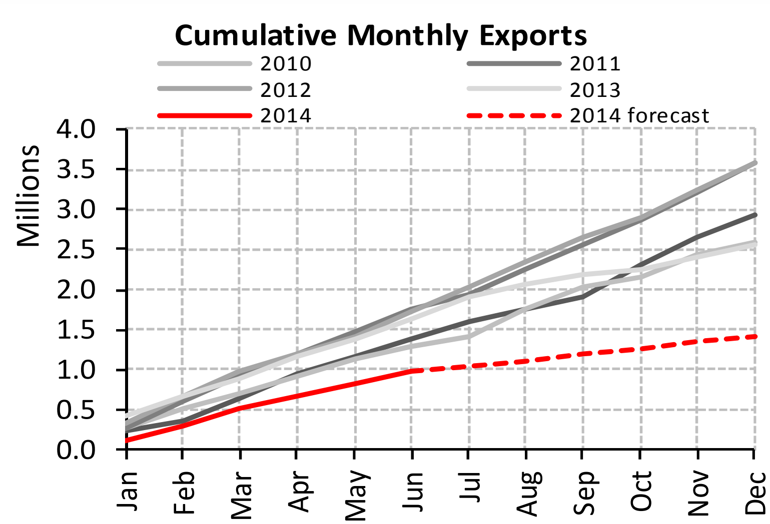
Data: GTIS, CRU

China is limiting the impact of Ukraine's troubles

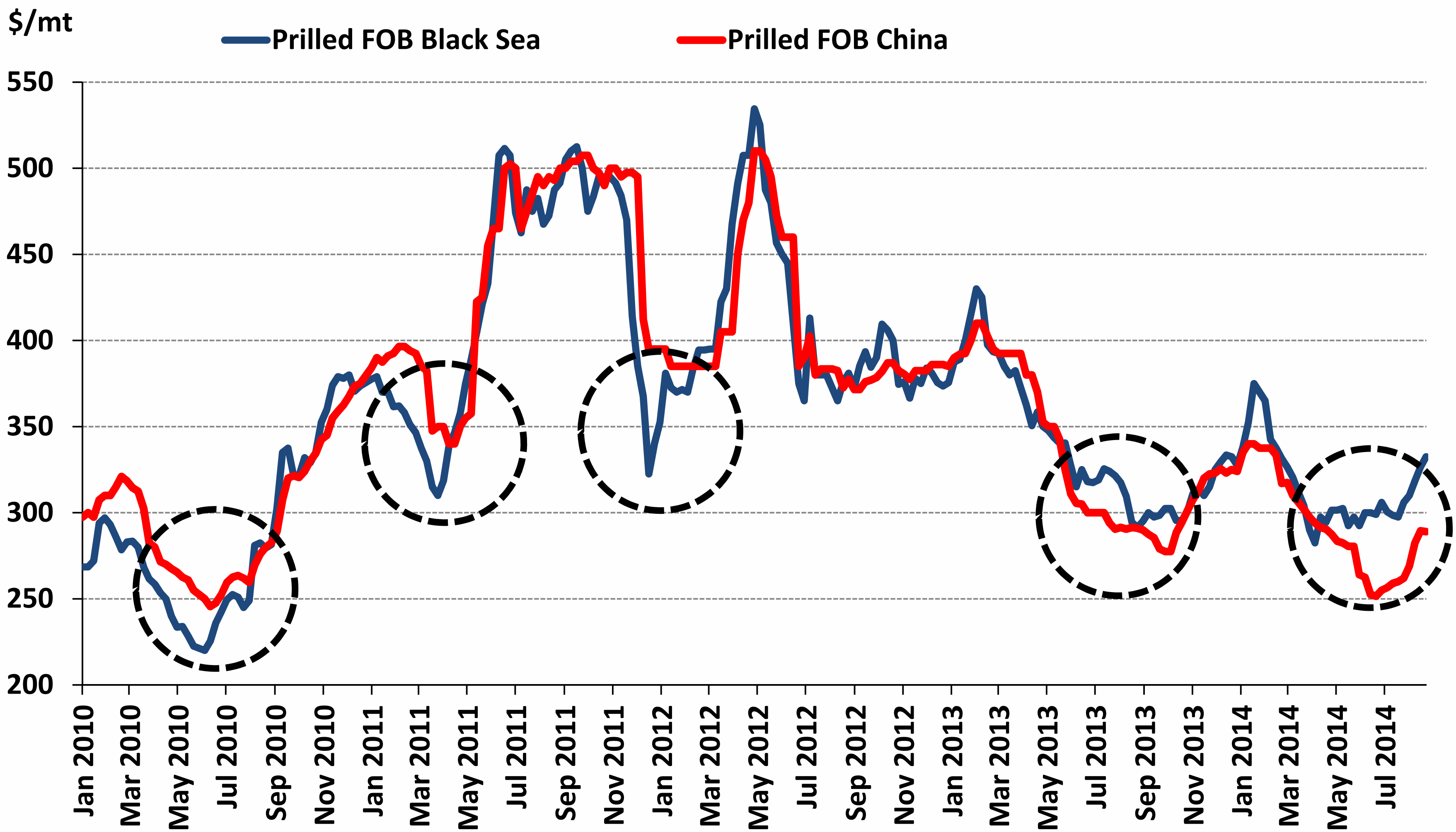




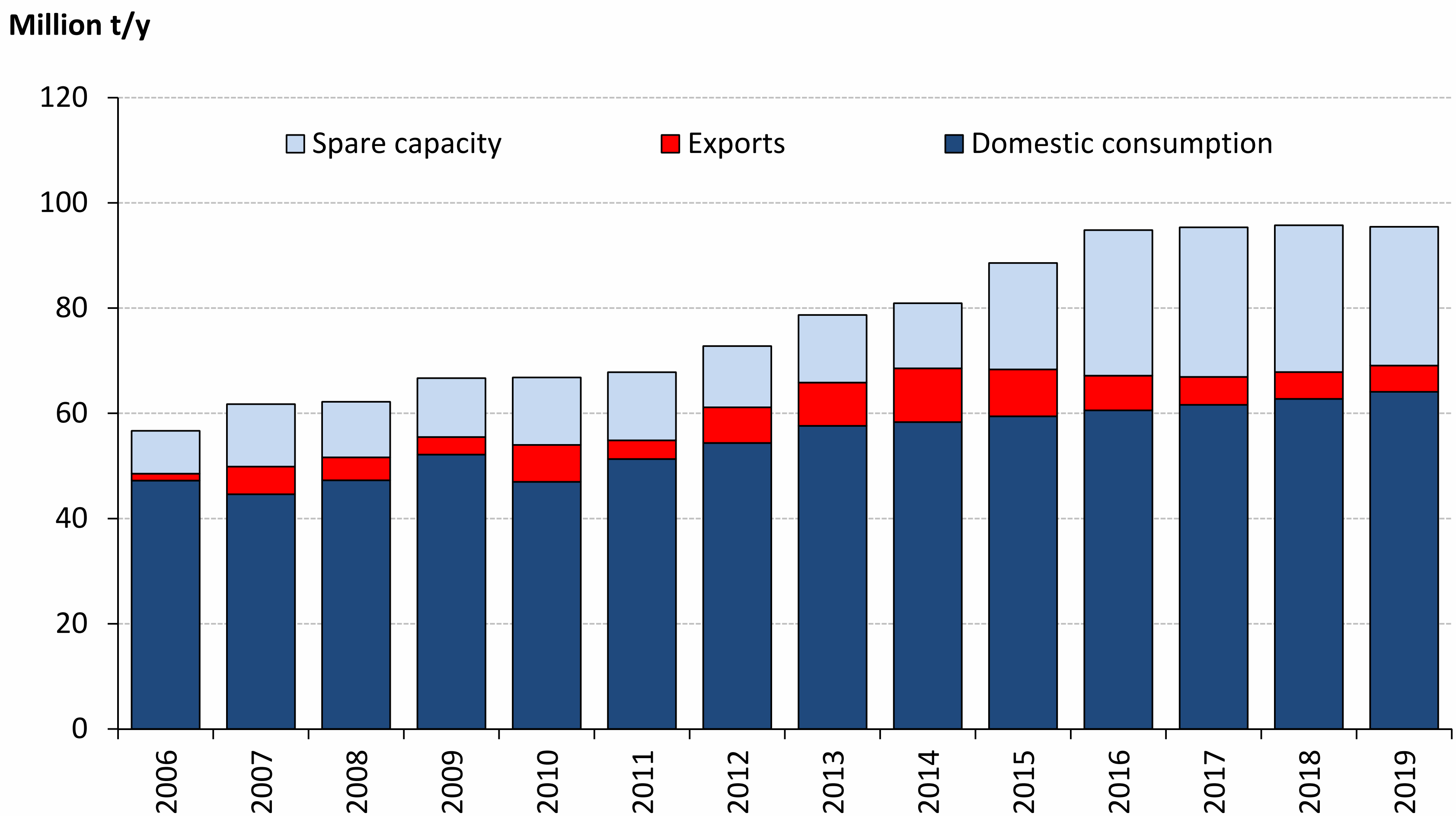




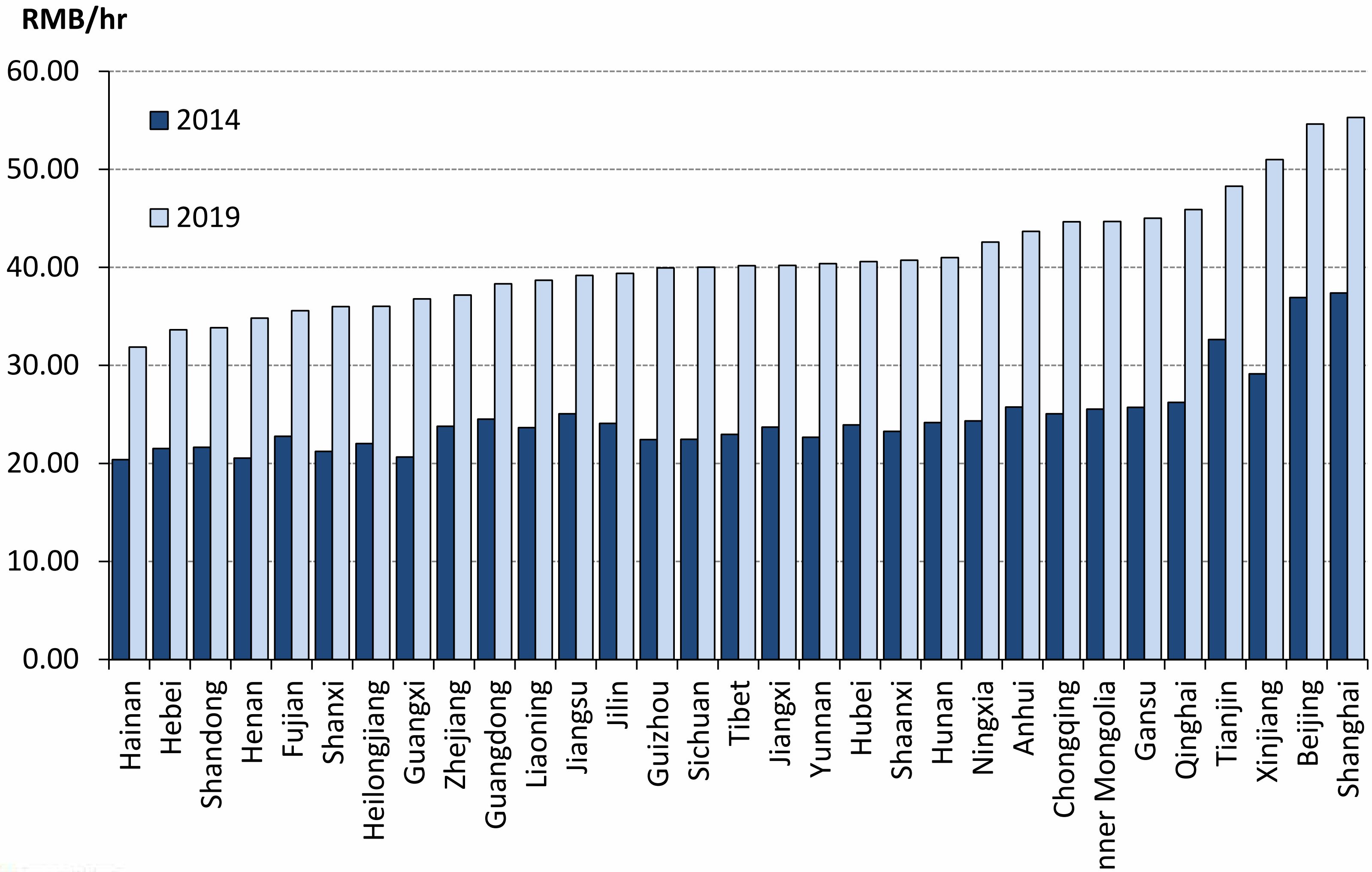
Chinese export values price setting since mid-2013



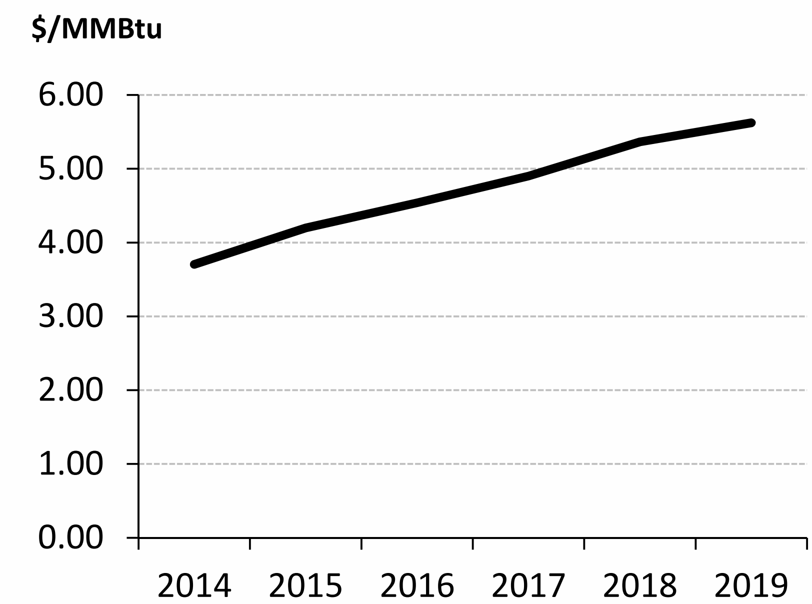
China’s urea market is in chronic oversupply

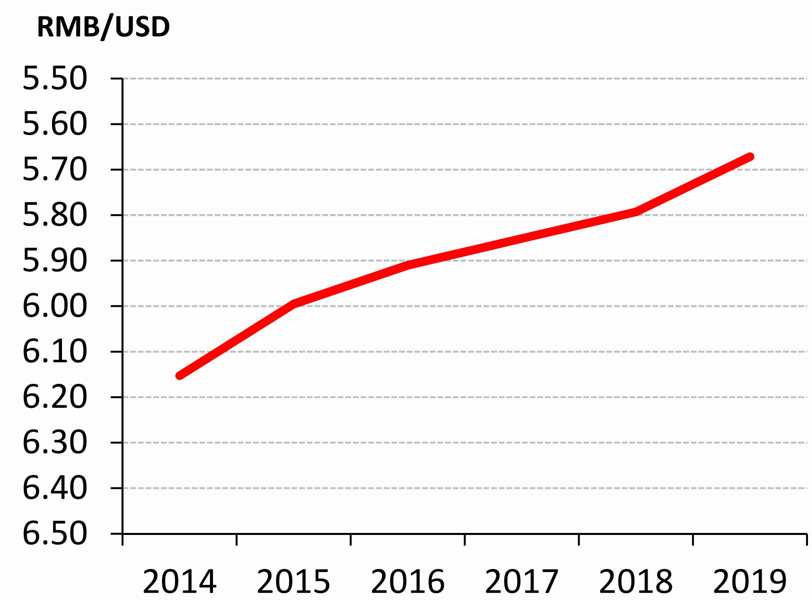


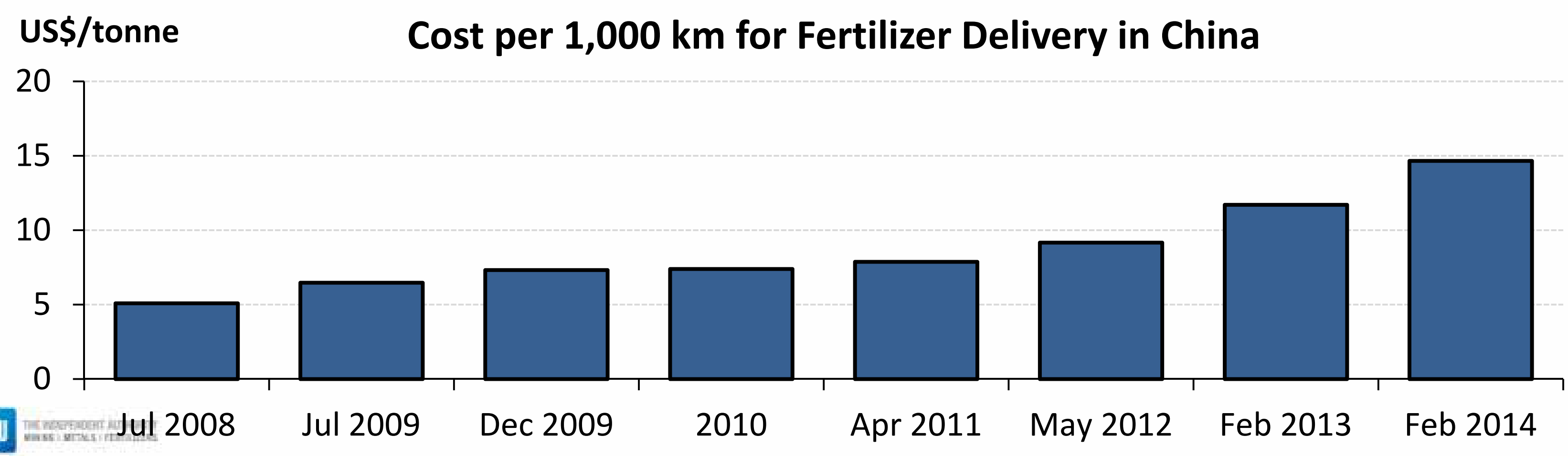
China less competitive as labour costs increase 65%



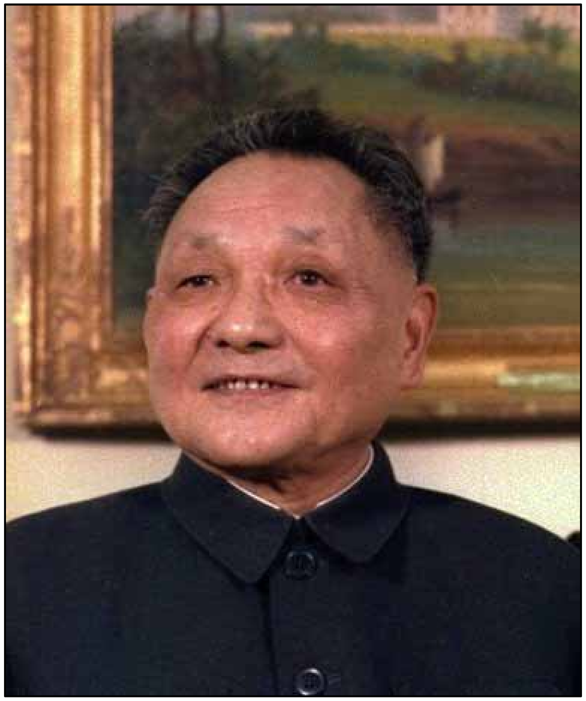
Coal & fright markets tighten; RMB strengthens







Market forces are distributing China's resources



In conclusion...

1. Strong fundamentals underpin both medium and long-term nitrogen demand...
2. ...but the market looking oversupplied following a massive expansion of global urea capacity and Chinese export policy
3. This will weigh on global nitrogen operating rates; especially so for prilled urea
4. China is now the global swing producer and events in the country's N market will determine the medium-term future of all N values
5. However, near-term market remains prone to supply disruptions, especially on the ammonia side

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Analysis: Our Products

MARKET OUTLOOKS

- Ammonia Market Outlook – published every 3 months
- Urea Market Outlook – published every 3 months
- Sulphur Market Outlook – published every 3 months
- Sulphuric Acid Market Outlook – published every 3 months
- Phosphate Fertilizer Market Outlook – published every 3 months
- Potassium Chloride Market Outlook – published every 6 months
- Phosphate Rock Market Outlook – published every 6 months

COST SERVICES

- Phosphate Rock Cost Report
- Nitrogen Cost Report
- Phosphate Fertilizer Cost Report
- Potash Cost Report

SPECIALIST REPORTS

- UAN Market Outlook
- Explosive Grade Ammonium Nitrate Market Outlook
- Ammonium Nitrates Market Outlook
- Ammonium Sulphates Market Outlook
- Potassium Sulphates & Potassium Nitrate Market Outlook
- China Fertilizer Market Outlook
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