The European livestock market, with emphasis on pig production, and also a success story of Norwegian exports.
Outline

- Introduction
  - *Myself and the Topigs – Norsvin merger*

- Global macro trends & European trends
- European market
- My European view of Norway and Norsvin
Norwegian
Profession

• Farmer
  – Netherlands and Germany
• Food Producer
  – Friivar.  [www.friivar.com](http://www.friivar.com)
  – Friberne.  [www.friberne.nl](http://www.friberne.nl)
• TOPIGS NORSVIN
  – Chairman at Dutch Cooperative Topigs
  – Chairman at Supervisory Board of Topigs Norsvin
A farmers deal

TOPIGS (Netherlands) and Norsvin (Norway) launched a joint company on 4th of June 2014.
TOPIGS and Norsvin is a strategic fit

<table>
<thead>
<tr>
<th></th>
<th>TOPIGS</th>
<th>Norsvin</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Ownership: Farmer owned companies</td>
<td>Topigs Group BV</td>
</tr>
<tr>
<td>2</td>
<td>Strong R&amp;D focus</td>
<td>Tempo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Talent</td>
</tr>
<tr>
<td>3</td>
<td>High-end combined product portfolio</td>
<td>N-L</td>
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<td></td>
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<td>Z-Line</td>
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<tr>
<td>4</td>
<td>Complementary geographical presence</td>
<td>Norsvin Duroc</td>
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<td></td>
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<td>Norsvin Yorkshire</td>
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</table>
Simple overview of the Topigs Norsvin corporate structure

- **Ownership**
  - Dutch: 66.5%
  - Norwegian: 33.5%

- **Supervisory Board**
  - Dutch: 4 seats
  - Norwegian: 4 seats

- **Board of Directors**
  - Martin Bijl (CEO)
  - Cor van Hertrooij (CFO)
  - Bjarne Holm (CDO)
  - Hans Olijslagers (CTO)

- **Nortura SA**
- **Norsvin SA (cooperative)**
- **Felleskjøpet Agri SA**
- **Vion Food Group**
- **Coöperatie Topigs Group UA**

- **Norsvin International Holding AS**
  - 33.5%

- **Topigs Group BV**
  - 66.5%

- **Topigs Norsvin Holding BV**

- **Brazil**
- **Canada**
- **USA**
- **Germany**
- **Russia**

...all other original TOPIGS international subsidiaries
Topigs Norsvin with strong global presence in all key markets.

- 1.6 million crossbred gilts/year
- 9 million doses of semen
- 100 million slaughter pigs
- €19 million R&D budget
All over the world

Present in 54 countries

We serve the Professional Pig Producers around the world

We know the local needs and circumstances
Topigs Norsvin – Value Proposition

Progress in pigs. Everyday

- Tailored offerings based on a complete product portfolio
- Integrated solutions focusing on the entire value chain
- World class applied R&D
- Excellent support through local presence
- Stringent bio-security focus

Partnership  Sustainability  Innovation  Ambition
We.
A unique team.

We.
Sharing a worldwide home field.

We.
We are Topigs Norsvin. A unique team of scientists, specialists, farmers, customers and partners. Spread across the world, and united in our vision to create Progress in Pigs. Every Day. We are proud to be a part of this company.

Based on our core values: Innovation, Ambition, Sustainability and Partnership, we passionately strive to be the world’s most innovative swine genetics company. Progress in Pigs. Every day.
topignorsvin.com
Outline

• Introduction
• Global macro trends & European trends
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Trends

- World population is growing very fast
- Agriculture production is also growing very fast
- Surplus
  - Milk
  - Sugar
  - Pigmeat
  - ....
- Speculation agriculture commodeties
- Commodety?
  - Quality
  - Food safty
  - Health
- Free market?
  - GMO
  - Antibiotics
  - MRSA
  - Manipulation of DNA
    - Cloning
  - Tax
  - Subsidies
Global strategic environment and key trends

**Market environment**

- Total feed cost is the major economic concern of professional pork producers
- Consolidation and professionalization among customers. More integrated
- Growing global pork meat demand: 2010 – 2030 growth of ~45%
- 95% of pork meat is consumed where it is produced

**Consolidation and trends**

- Consolidation among swine genetics players: 3-4 global players in ~7 years time
- Animal and consumer health, animal welfare and environmental impact increasingly important
- Lean meat yield more important, to yet higher weights. Technified farming → precision farming
- Qualified labor is limited costs & quality

The global swine industry & swine genetics industry

Growing global pork meat demand: 2010 – 2030 growth of ~45%
World Market

• 5 markets - 95% of the market within the continent

• Asia
  – FC/efficiency
  – China Decrease with 10 Mln Sows

• South America
  - FC/efficiency/sustainability
  - Stable number of sows

• North America
  – FC/Efficiency/ sustainability/welfare
  – 6 % more production
European market

• Eastern Europe
  – FC/efficiency
  – Lots of politics
  – Good opportunities
  – Growing markets
  – Political situation stays uncertain

• Western Europe
  – FC/efficiency, but more consumer demands like quality/taste/welfare
  – Self sufficiency 115 %
  – Price below cost price
  – European pig farmers suffering
  – Does the classical pig cycle still work?
  – Spain is the only country with growth
  – Netherlands/France/Germany/Italy -5 to -10 %
  – Denmark?
  – A lot of bankruptcy
Development pig farms in The Netherlands
(Source: Centraal bureau voor de Statistiek (CBS))

Year (inventory date: April)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of farms (x 1,000)</th>
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Prices the Netherlands

All prices are excl. VAT.

Used sources:
- * Agrimatie.nl – Wageningen UR
- ** Landelijk biggenprijzenschema – Wageningen UR (new release every year in July)

![Graph showing prices over time for piglets and meat](image-url)
Market history slaughter swine

Schweine

Quelle und Copyright ISN e.V., Damme
Outline

• Introduction
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• My European view of Norway and Norsvin
My view on Norway

- Beautiful country
- Farmers important in the society
- Working very well together in the whole value chain
- System seems to be in balance
- Good quality products
  - Good taste
  - Healthy
  - Fair price
- Something the rest of the world is looking for?
BONDENS SJØLBESTEMMELSESRETT
The farmers right to make decisions

VITENSKAPENS LANDEVINNINGER
Progress through Science

FRAMGANG FOR DE MANGA
Progress for all
Norsvin: CT scanning of pigs since 2008

- Leading in innovations within pig breeding globally
Norsvin Delta Station

Computed tomography (CT)

- 3,000 purebred boars on-test annually
- 1200 pictures/animal
- In-house Matlab script (Dr. Kongsro)
- Fully automatic calculation of *in vivo* carcass quality
- High value for the breeding program:
  - High heritabilities
  - Data on the selection candidate
  - Large # animals tested
Norsvin Landrace

1958
Start of selection as Norsvin. AI introduced as tool

1960
Ultrasonic back fat evaluation implemented

1970
Start of central testing stations

1992
BLUP, FIRE stations, # live born piglets etc.

1997
Carcass dissection and Meat Quality protocol

2001
Piglet weighing and mortality protocol implemented

2008
Computer Tomography implemented as off-test tool

2014
Genomic selection incorporated in breeding program

Since the beginning:
Bred for terminal efficiency and productivity

A UNIQUE PRODUCT
GLOBALLY
The first joint product
Innovation - Progress - Balance

TN70

Do it on their own ...
Breeding Program

Sustainable genetic progress to an integrated industry using state of the art technology in a vast global population structure securing high health supply

We shall double annual genetic progress
PROGRESS IN PIGS. EVERY DAY.