



Aquaculture Economics & Management >

Volume 22, 2018 - Issue 3: Aquaculture Economics and Marketing—Special Session of Aquaculture America 2017, San Antonio, Texas, February 20–22, 2017

1,546 67

Views | CrossRef citations to date | Altmetric

0

Original Articles

# Profitability in Norwegian salmon farming: The impact of firm size and price variability

Frank Asche , Marius Sikveland & Dengjun Zhang

Pages 306-317 | Published online: 14 Feb 2018

Cite this article

<https://doi.org/10.1080/13657305.2018.1385659>



Sample our  
Economics, Finance,  
Business & Industry Journals  
>> **Sign in here** to start your access  
to the latest two volumes for 14 days

Full Article

Figures & data

References

Citations

Metrics

Reprints & Permissions

Read this article

Share

## ABSTRACT

In this paper, we investigate the impact of firm size and price variability on firm profitability in the Norwegian salmon farming industry using a panel data set of all companies from the period 2000 to 2014. Several proxies for firm size are included in the analysis. We find that firm's share of total sales has a positive impact on profitability, while an alternative proxy, total assets, is negatively linked to profitability. Financial leverage (gearing) has a negative impact, but liquidity (current assets/current liabilities) is not found to significantly affect profitability. Operating efficiency indicators like working capital management (net working capital/total assets) and operating leverage (fixed assets/total assets) are positively associated with profitability. Finally, we find that salmon price variability increases profitability, and that smaller companies are more able to take advantage of the profit opportunities that price variability offer, compared to larger companies.

## KEYWORDS:

Firm size

price variability

profitability

salmon

---

## Acknowledgment

Thanks to two reviewers and the guest editor for helpful comments.

---

## Notes

Markets can also create additional risks through reputation effects (Bronnmann & Asche, [2017](#); Liu, Lien, & Asche, [2016](#); Sha, Roheim, Insagnaris, & Asche, [2015](#)) and regulations (Chu & Tudur, [2014](#); Osmundsen et al., [2017](#)).

After adjusting for inflation this number is 10.7 million in 2015.

---

## Additional information

### Funding

Financial support for the Norwegian Research Council (CT-233689, CT-267572) is acknowledged.

---

#### Related Research Data

##### [The Behaviour of Salmon Price Volatility](#)

Source: Marine Resource Economics

##### [INNOVATION AND PRODUCTIVITY GROWTH IN NORWEGIAN PRODUCTION OF JUVENILE SALMONIDS](#)

Source: Aquaculture Economics & Management

##### [The Cost of Lice: Quantifying the Impacts of Parasitic Sea Lice on Farmed Salmon](#)

Source: Marine Resource Economics

##### [The Bumpy Road of Demand Growth—An Application to Atlantic Salmon](#)

Source: Marine Resource Economics

The Effects of Business Environment and Strategy on a Firm's Rate of Return on Assets

Source: Financial Analysts Journal

Patterns in the Relative Price for Different Sizes of Farmed Fish

Source: Marine Resource Economics

Fish Price Volatility

Source: Marine Resource Economics

## Related research

People also read

Recommended articles

Cited by  
67

[SALMON AQUACULTURE: LARGER COMPANIES AND INCREASED PRODUCTION >](#)

Frank Asche et al.

Aquaculture Economics & Management

Published online: 19 Aug 2013

[Determinants of investment behavior in Norwegian salmon aquaculture >](#)

Ursula Landazuri-Tveteraas et al.

Aquaculture Economics & Management

Published online: 8 May 2023

[Organic salmon farming - A profitable differentiation strategy >](#)

Kristian Waerness et al.

Aquaculture Economics & Management

Published online: 10 Jun 2024

[View more >](#)



## Information for

[Authors](#)

[R&D professionals](#)

[Editors](#)

[Librarians](#)

[Societies](#)

## Opportunities

[Reprints and e-prints](#)

[Advertising solutions](#)

[Accelerated publication](#)

[Corporate access solutions](#)

## Open access

[Overview](#)

[Open journals](#)

[Open Select](#)

[Dove Medical Press](#)

[F1000Research](#)

## Help and information

[Help and contact](#)

[Newsroom](#)

[All journals](#)

[Books](#)

## Keep up to date

Register to receive personalised research and resources by email



Sign me up



Copyright © 2026 Informa UK Limited [Privacy policy](#)

[Cookies](#) [Terms & conditions](#) [Accessibility](#)

Registered in England & Wales No. 01072954  
5 Howick Place | London | SW1P 1WG



**Taylor & Francis**  
by informa