

Impacts of extreme weather events in Norway

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Photo: Tore Haraldset

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- What have been the recent trends?



Photo: Tore Haraldset

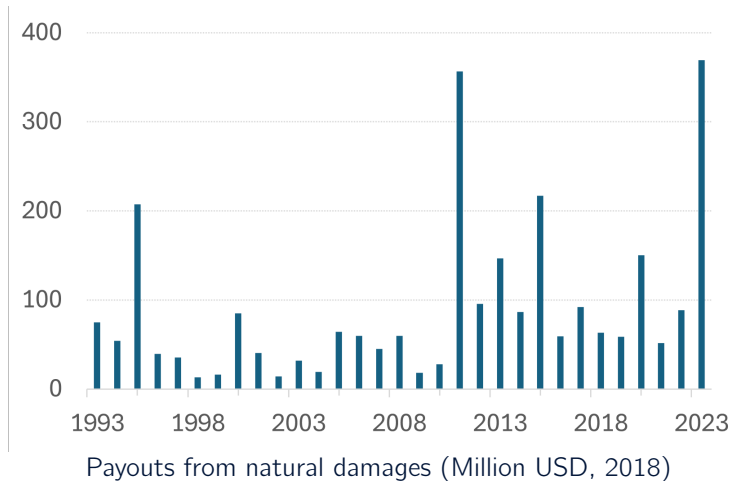
Is Norway shielded from the worst effects of climate change?

- **Perception:** Less severe impacts
- **Projection:** More precipitation; sea level rise
- What have been the recent trends?
- Universal insurance provides unbiased data on prevalence of “natural disasters”

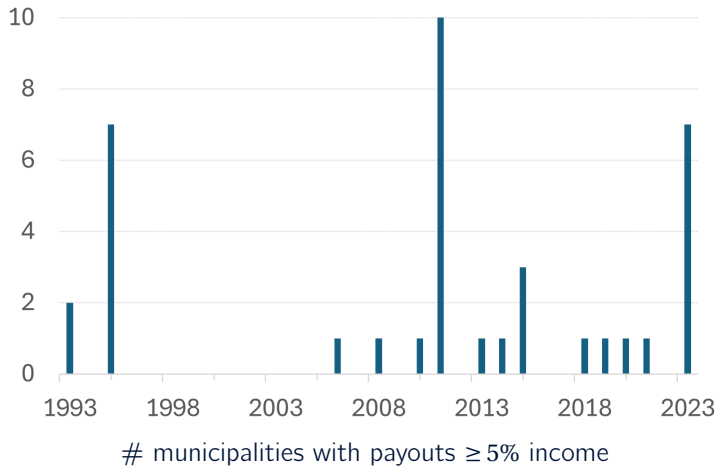


Photo: Tore Haraldset

Norway has been increasingly affected by extreme weather events

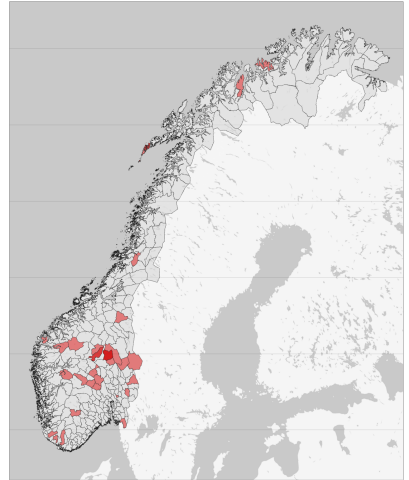


Norway has been increasingly affected by extreme weather events



What are the economic effects of these events on households?

insurance payouts data



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insurance payouts data

+

administrative data



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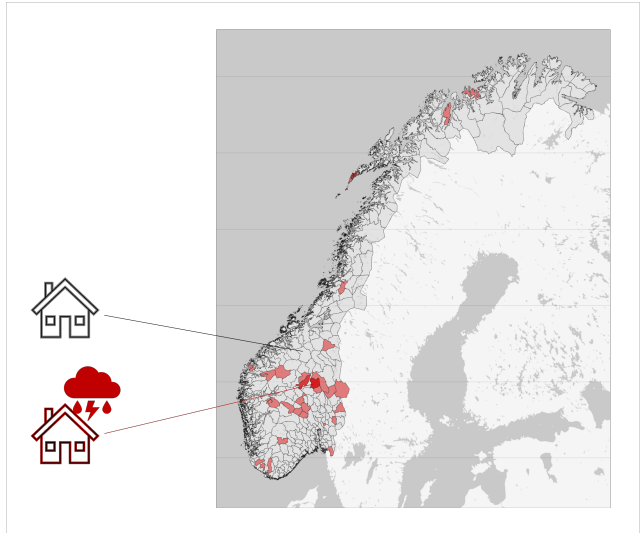
insurance payouts data

+

administrative data

⇒

compare trends



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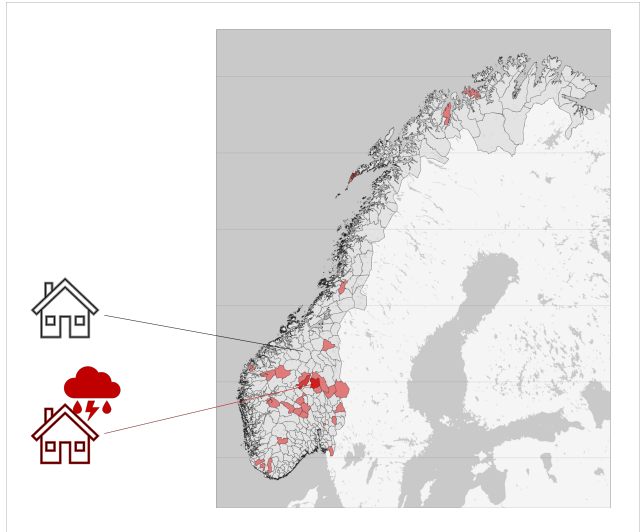
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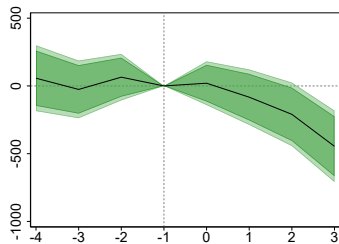
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compare trends

**Indirect impact
of extreme weather events**



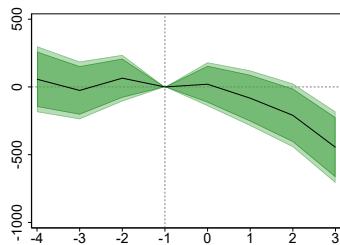
Extreme weather events affect households' income, wealth and consumption



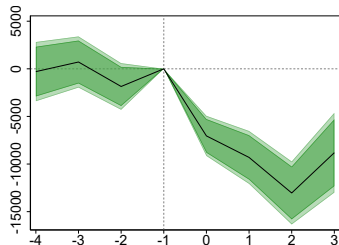
Income after taxes

- Cumulative drop in income of $\approx \$720$

Extreme weather events affect households' income, wealth and consumption



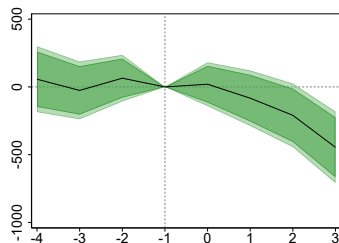
Income after taxes



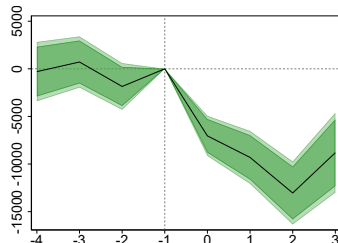
Wealth

- Cumulative drop in income of $\approx \$720$
- Wealth declines by $\approx \$13,000$

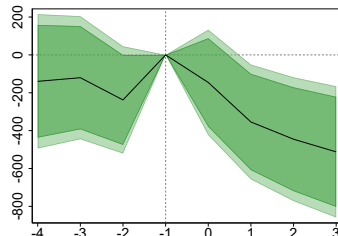
Extreme weather events affect households' income, wealth and consumption



Income after taxes



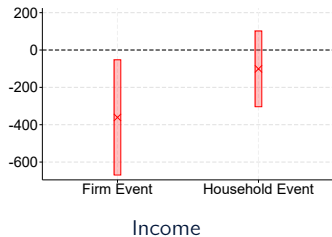
Wealth



Consumption

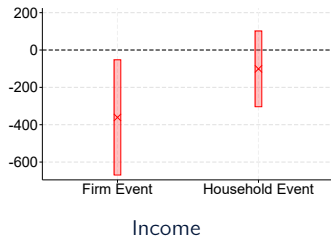
- Cumulative drop in income of $\approx \$720$
- Wealth declines by $\approx \$13,000$
- $\approx \$1,460$ fall in consumption

Indirect impact due to firm damages and lower house prices



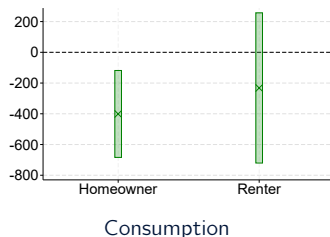
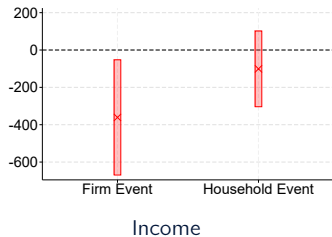
- Larger declines in income when local firms severely damaged

Indirect impact due to firm damages and lower house prices



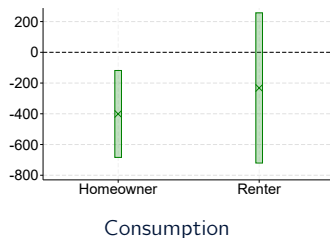
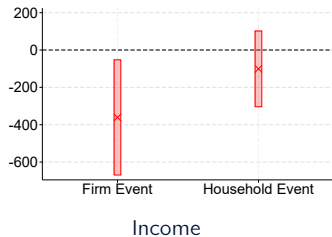
- Larger declines in income when local firms severely damaged
⇒ temporary firm closures affect labor income

Indirect impact due to firm damages and lower house prices



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⇒ temporary firm closures affect labor income
- Larger declines in wealth and consumption for homeowners vs renters

Indirect impact due to firm damages and lower house prices



- Larger declines in income when local firms severely damaged
⇒ temporary firm closures affect labor income
- Larger declines in wealth and consumption for homeowners vs renters
⇒ lower housing prices amplify indirect effects

Key takeaways

1. Extreme weather events are becoming more frequent and costly in Norway
2. Despite insurance, affected households have seen a relative fall in their income, wealth and consumption
3. Indirect impact driven by damages to firms and lower housing prices