# The Impact of the Crisis on European Firms

## EFIGE Third Policy Report

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**The triggers of competitiveness**
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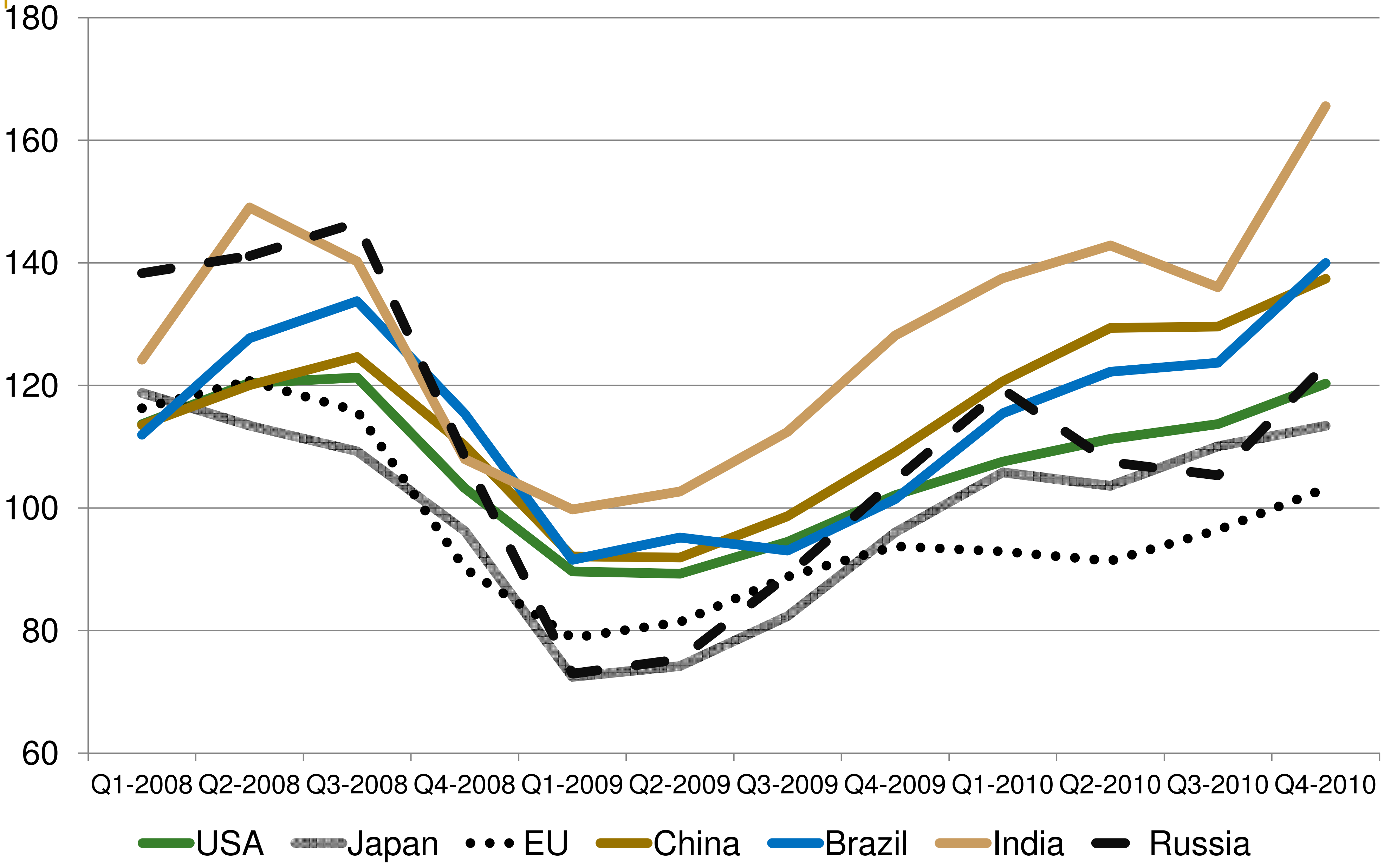
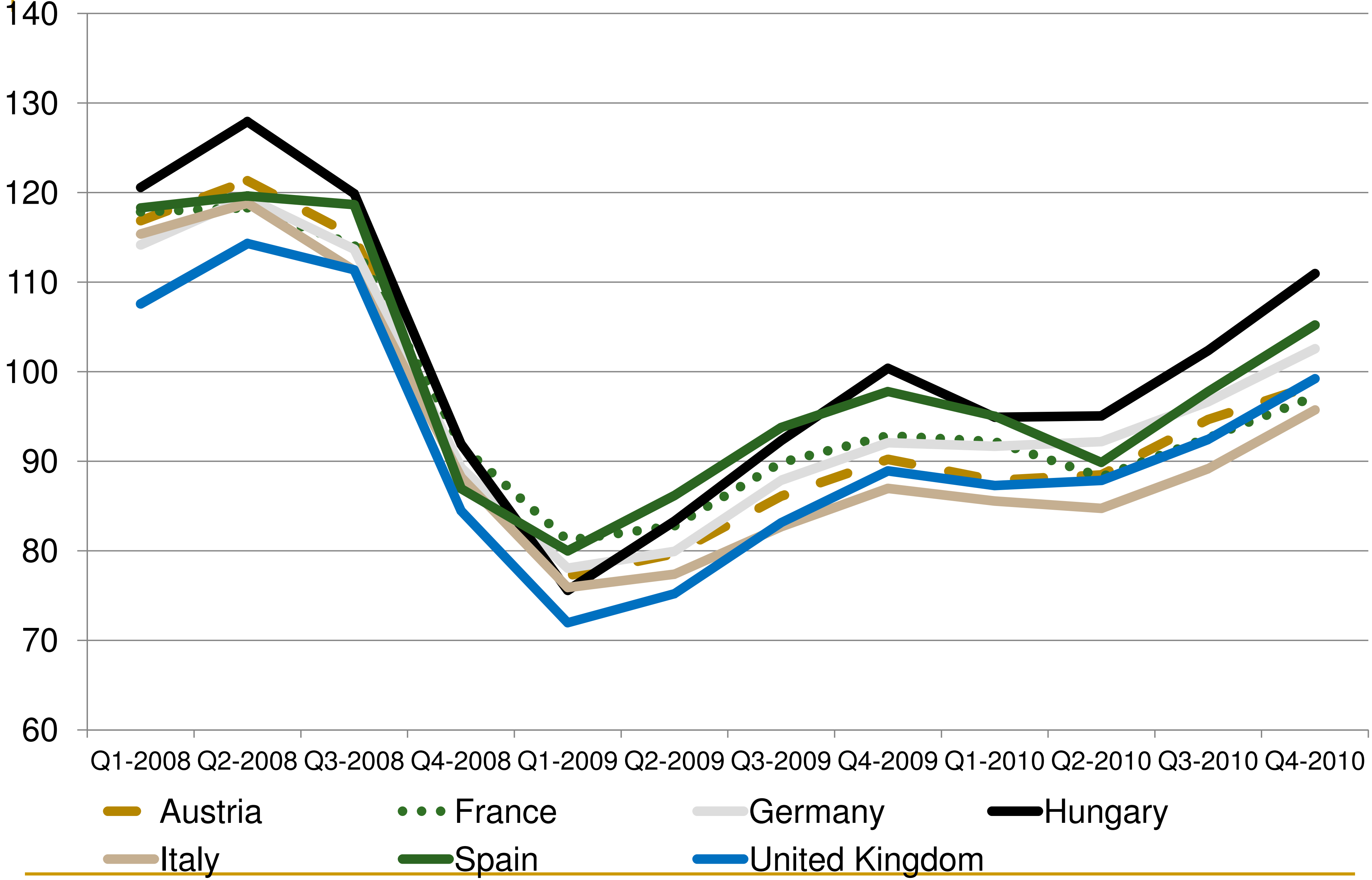
# Exports (2007=100)



## Exports of EFIGE countries (2007=100)



# Questions

1) How much did European firms suffer during the crisis in domestic and export markets?
2) Which firms were affected less by the crisis?
3) What can policy do to mitigate the effect of the crisis on firms and workers?

# Contributions

- Previous studies have analyzed the effects of the crisis
  - at country- or industry-level
  - or firm-level for a particular country
- This report uses cross-country firm data.
- Importance: Firms faced different environments in different countries.

# Outline

1) Data and methods
2) Heterogeneity
3) Labour
4) Network/linkages
5) Credit and finance
6) Fiscal link
7) Conclusions

# Data

- The number of firms in the survey totals 15,000
  - around 3,000 firms for France, Italy and Spain,
  - more than 2,200 for UK and Germany,
  - 500 for Austria and Hungary.
- Complemented by balance sheet data from Amadeus
  - Correlation regarding sales figures is about 70%
  - Good match only for France, Italy, Spain and Hungary

# Empirical approach

- Change in turnover (or exports, employment) between 2008 and 2009, in percentage
  - Survey question: "Did you experience a reduction of your turnover during 2009 in comparison with 2008?"
  - For turnover, the dependent variable is categorical:
    - larger decline than 30 %;
    - between 30-10 % decline;
    - smaller decline than 10%;
    - no change or growth.
- For exports, and employment, the dependent variable ranges between -100% and +100% change
- We weight the regression with sample weights

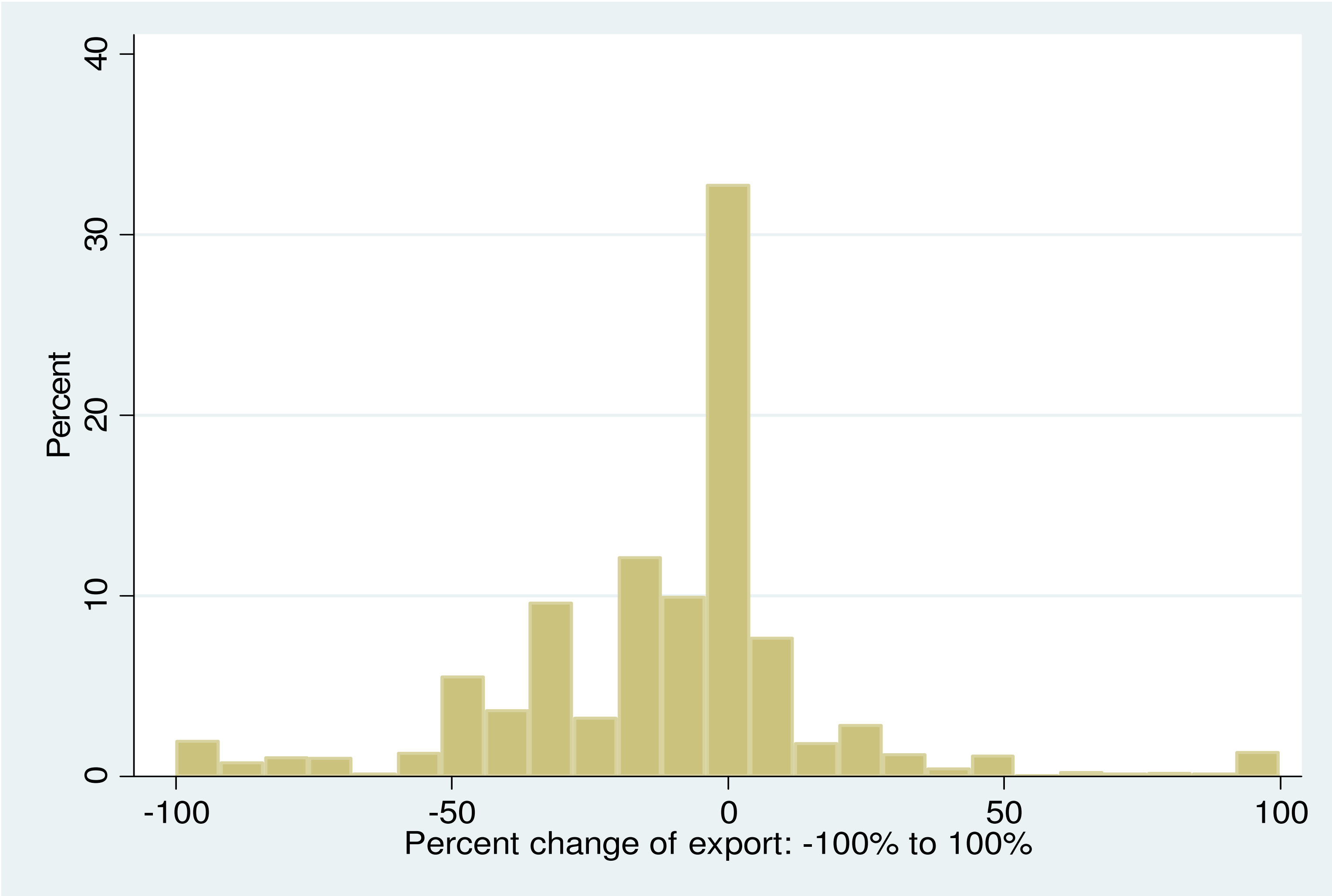
# Heterogeneity

Despite a synchronised, substantial macro-economic shock, the firm's response was rather diverse and 10-20 percent of firms did well in 2009 even in the hardest hit industries and countries. However, firm size itself made no difference.

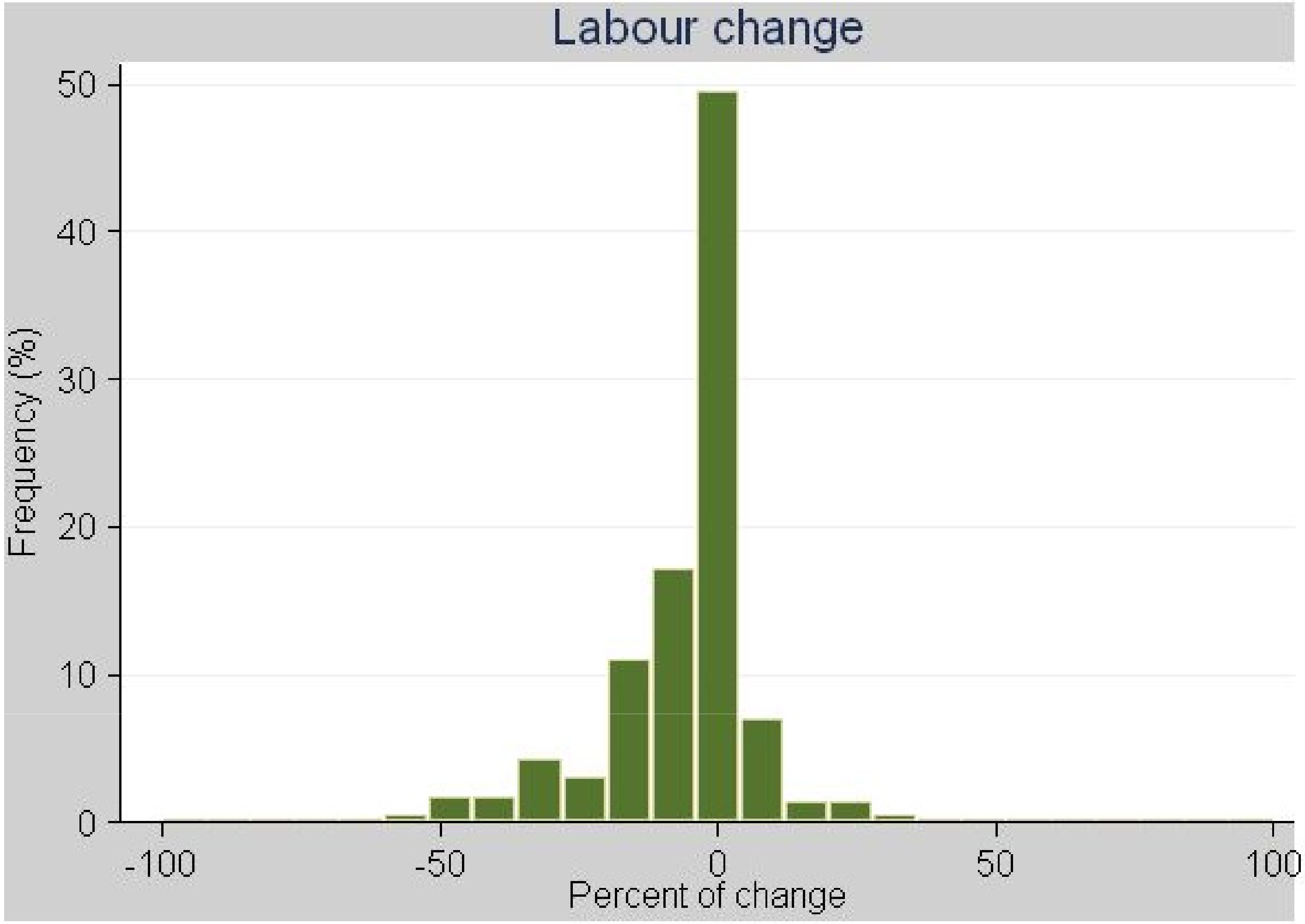
# Heterogeneity in sales response

| Change | Frequency (%) |
|---|---|
| Larger decline than 30 % | 18.1 |
| Between 30-10 % decline | 34.4 |
| Smaller decline than 10% | 19.1 |
| No change or growth. | 28.4 |

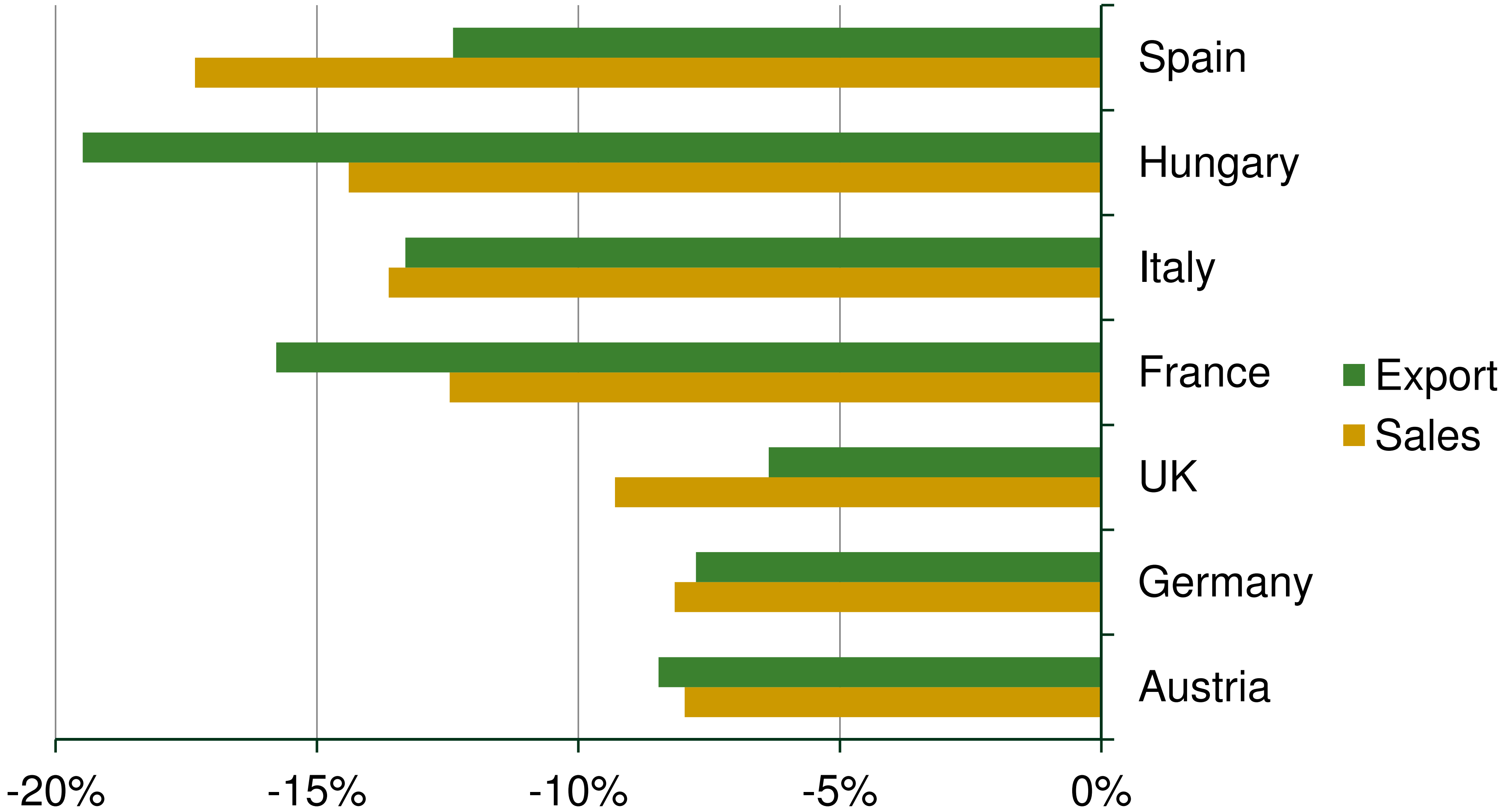
# Heterogeneity in export response



# Heterogeneity in employment response



# Heterogeneity by country and export vs sales



# Employment

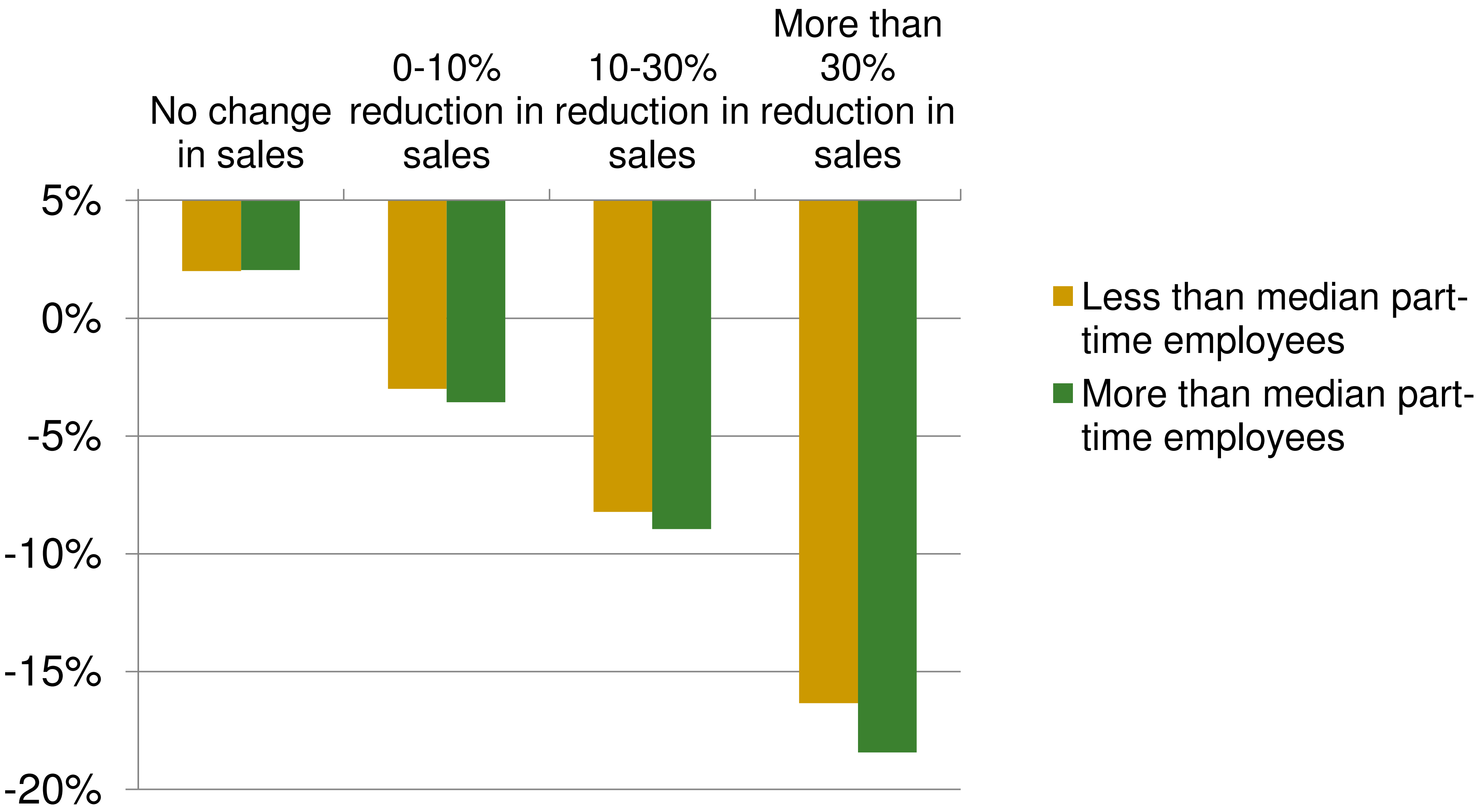
Firms reduced employment less than their sales dropped, and firms with relatively more skilled workers preserved more jobs.

Firms with part-time workers declined more

# Part-time employment and skill composition

1) Firms employing a significant share of part-time workers are more likely to lay off workers;
2) Firms employing more skilled workers reduced their labour less:
   Skill composition of labour mattered in Germany, Italy and Hungary;
3) Firms which are affiliates and use outsourcing reduced their labour to a greater extent:
   This effect is the strongest in Austria, Germany and Hungary

# Part-time workers and labour decline



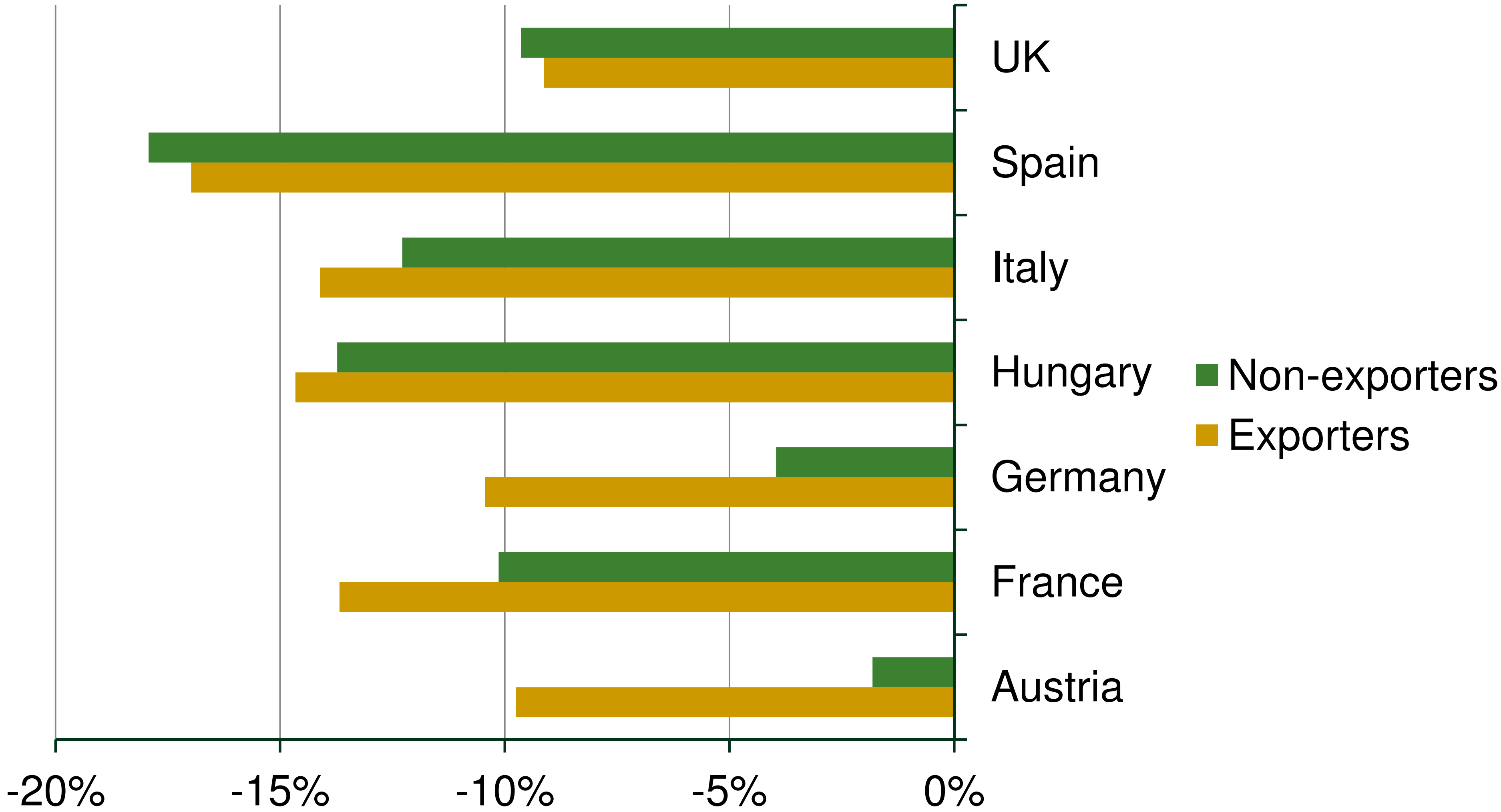
# Trade

Exporters contracted more than non-exporters, while importers suffered less of a decline.

# Trade contributes to the transmission of the crisis

- Comparing mean sales decline of exporters and non-exporters.
- Conditional on country, industry and size class, sales of exporters declined 2.2pp more than those of non-exporters.
- Importers suffer less: 0.8pp smaller decline.

# Average sales decline of exporters and non-exporters



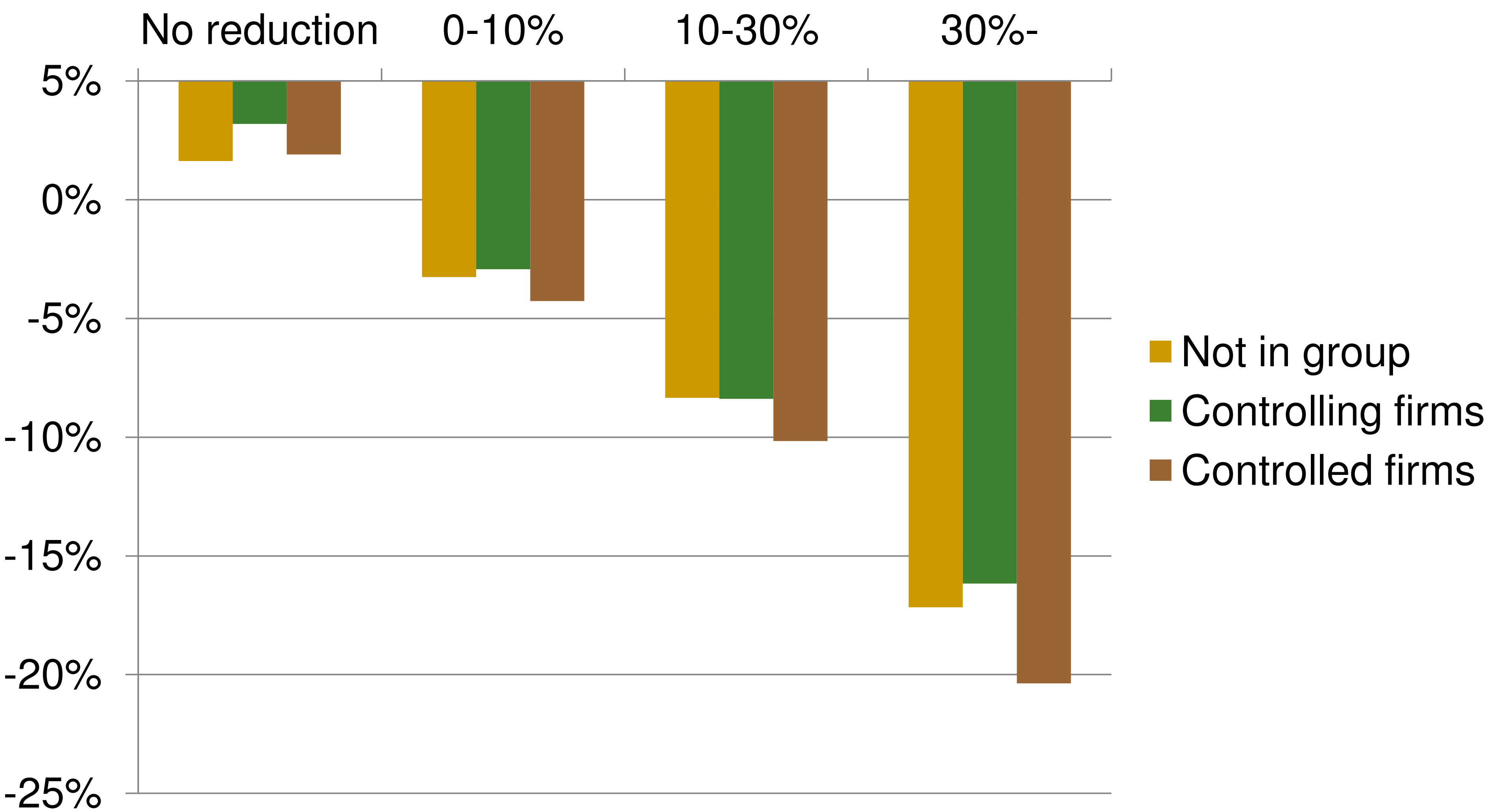
# Linkages, networks

Outsourcers and firms that control other companies fared somewhat better, while firms relying on specific demand from others lost more.

# Linkages in international context

- Outsourcing and production-to-order matter less for firms which are part of a multinational group
- Sales of firms in industries which has more downstream linkages decreased more, but this effect was much smaller for exporters and affiliates of other firms

# Firm control and labour change



# Finance

Firms relying on external finance and experiencing financial constraints to growth experienced a greater sales decline. Firms with greater pre-crisis tangible assets or relying on local bank finance were particularly constrained.

# Financially constrained firms contract more

- Firms relying on **external finance** and experiencing financial constraints to growth experienced a greater sales decline;
- The use of **trade credit** itself did not prove to be a significant factor.

# Fiscal policy

Expansionary fiscal policy both mitigated the effects of the crisis through supporting general domestic demand and ensuring continued orders for firms supplying the public sector.

# Fiscal stimulus

The state has been an important stabilizer in the crisis.

1) Firms with clients from the public sector managed with smaller decline in sales;
2) Countries in a good fiscal position - Germany and France - could expand and stabilize. In these countries, exporters were hurt relatively more;
3) In countries that could not expand owing to a home-grown crisis, like Hungary and Spain, sales of non-exporting firms declined along with exporters.

# Insights for policy

- **Dominant firms, centrally placed in the technology, trade and ownership network, fared better.**
  - Firms producing final goods
  - relying on skilled workers.
  - Not making specific products ordered by large customers
  - Relying on a network of suppliers (importing /outsourcing)
  - Controlling other companies at home or abroad

- In crises, **policy** should focus on helping stabilize firms that are
  - in weaker position,
  - owned by foreign / larger firms
  - making less skill-intensive products
  - Being a supplier, making specific products to large customers

# Is firm behaviour during crisis related to competitiveness?

1) Whether firms who are falling less during crisis are more competitive?
2) How do competitive firms behave during crisis?
3) Are there specific policies which may keep competitive firms afloat during crisis? Should they be activated? Are they different in normal times?
4) How crisis may induce reallocation of resources? Is destruction really creative? Does it enhance competitiveness?