

# On the main determinants of medical costs in accident insurance: a comprehensive analysis of the Swiss market

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## Abstract

Professional accident insurance (or workers' compensation) covers medical expenses and salary replacement following accidents. Unlike other insurance branches, it operates under a single group policy per company, with premiums varying by company characteristics, region, industry sector, claim history, and other factors. In Switzerland, this insurance is mandatory and divided into two branches: work-related accidents and leisure-time injuries. Using a novel dataset covering the entire Swiss accident insurance market with over 1.5 million companies from 2003 to 2019, we investigate the determinants of medical costs arising from accident insurance claims. This dataset enables, likely for the first time, a direct comparison of work- and leisure-related accidents, the latter of which are rarely examined in the existing literature. Surprisingly, we find that several work-related variables, including company size and industry sector, either directly or indirectly influence medical costs associated with leisure-related accidents. We use regression models to identify and quantify differences across business activities, company sizes and geographical regions.

**Keywords:** non-life insurance; accident insurance; medical costs; (non-)occupational accidents; group health insurance; worker's compensation.

## References

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