

Traditional Experience Rating at Suva - description and experiences since 2003



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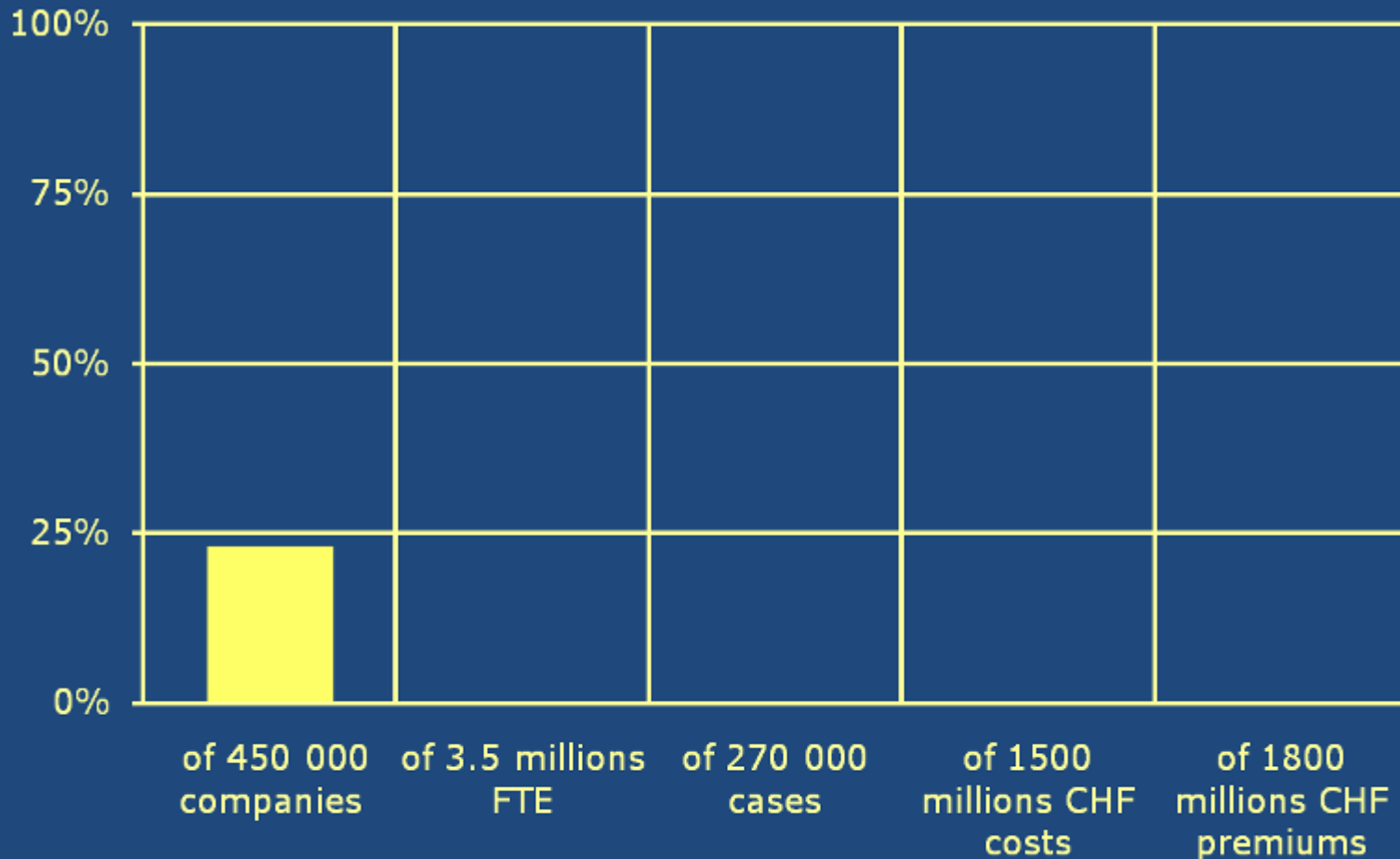
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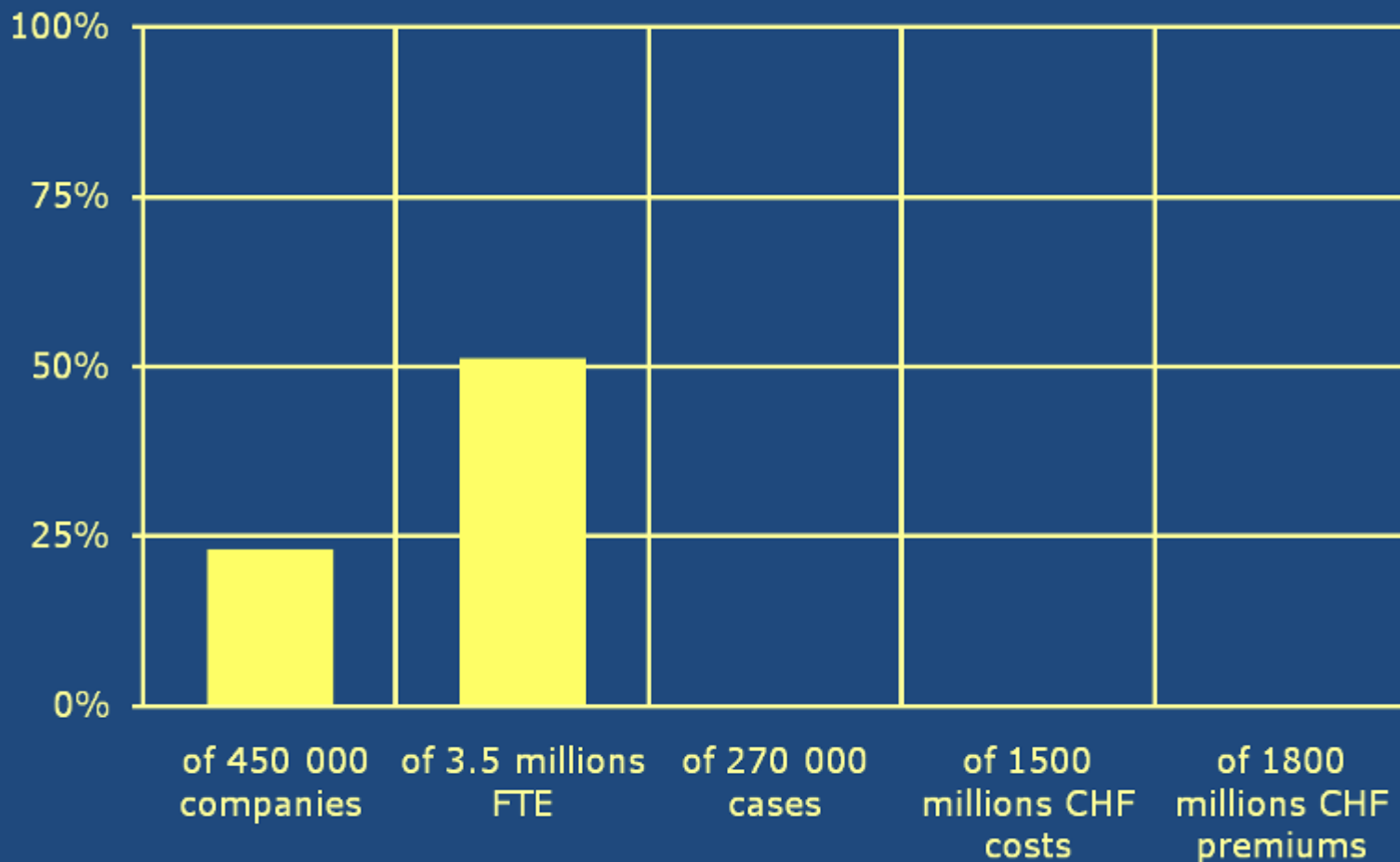
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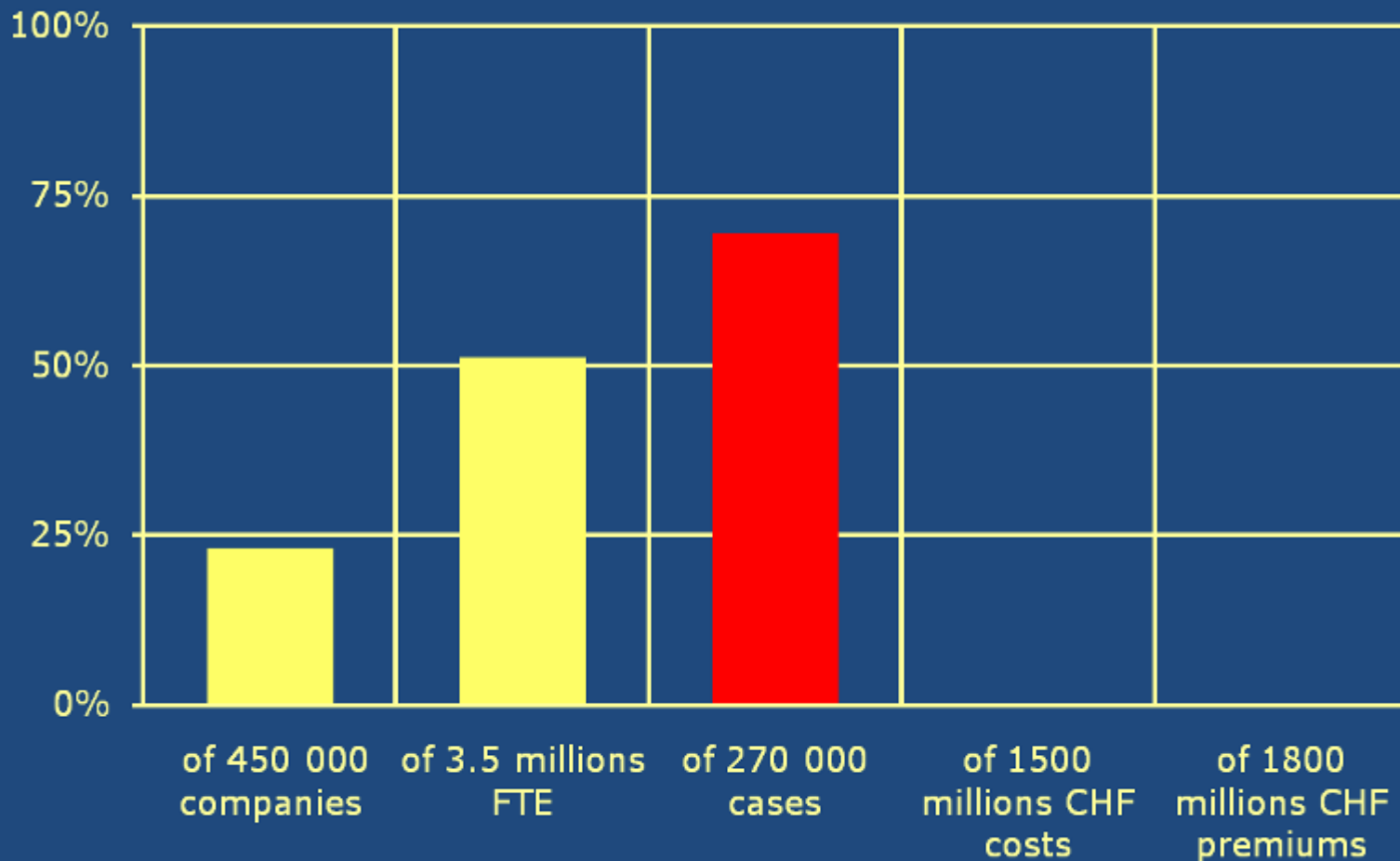
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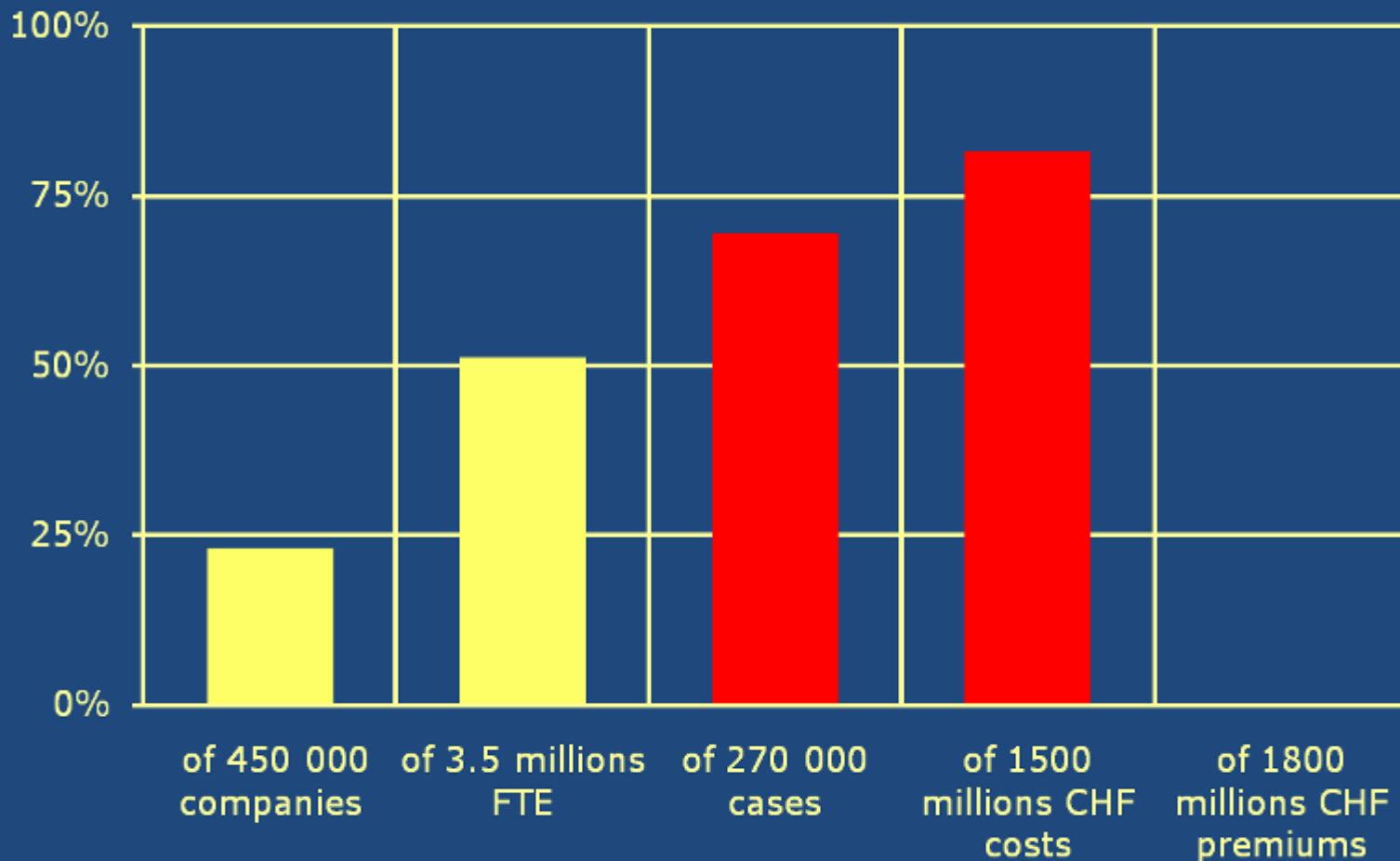
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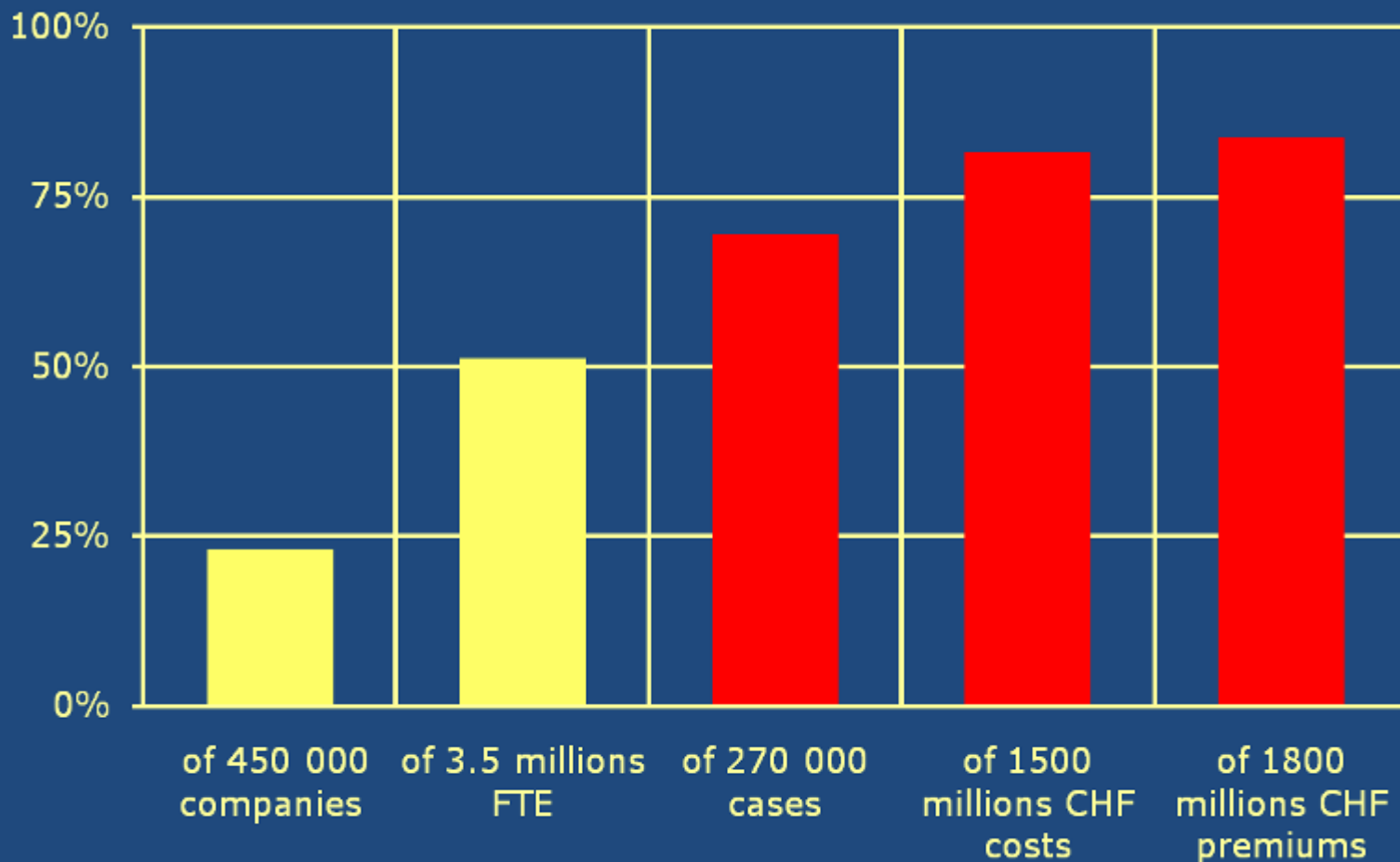
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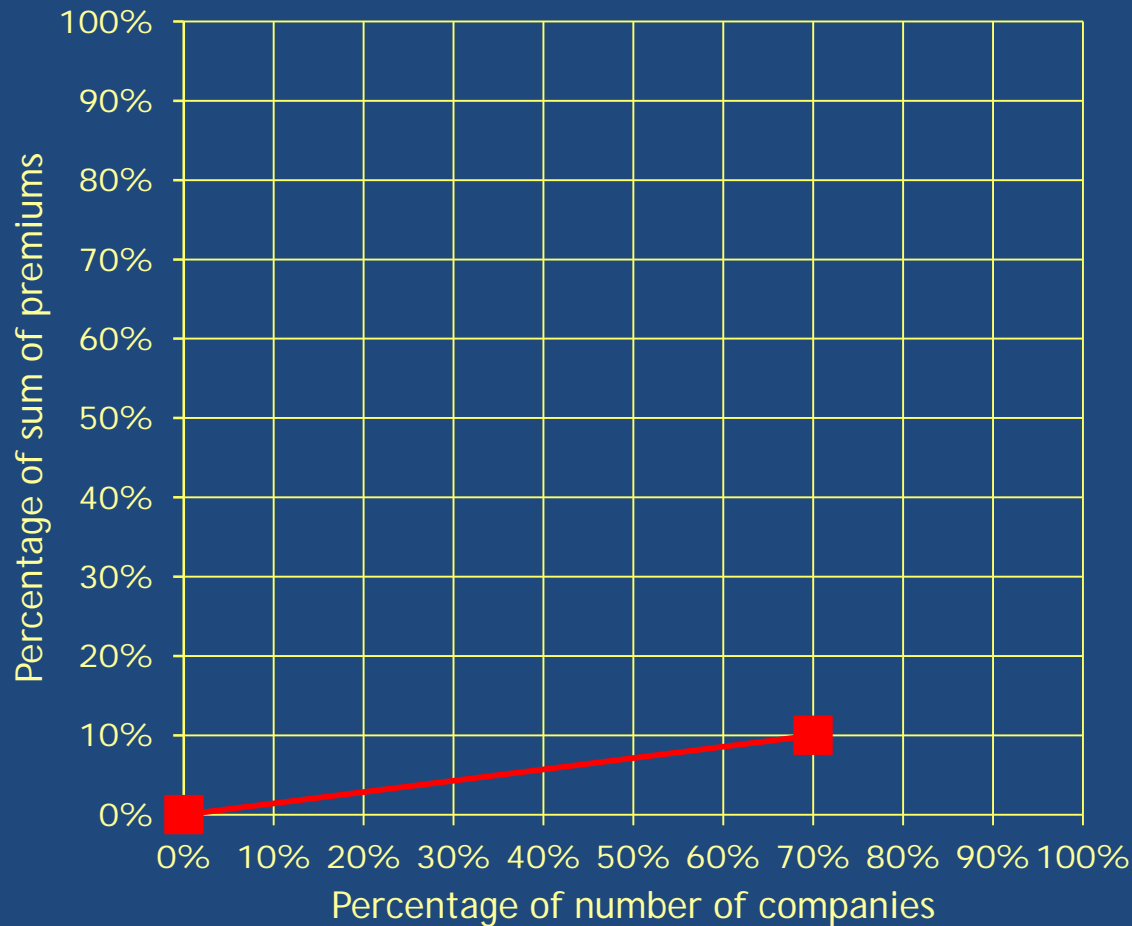
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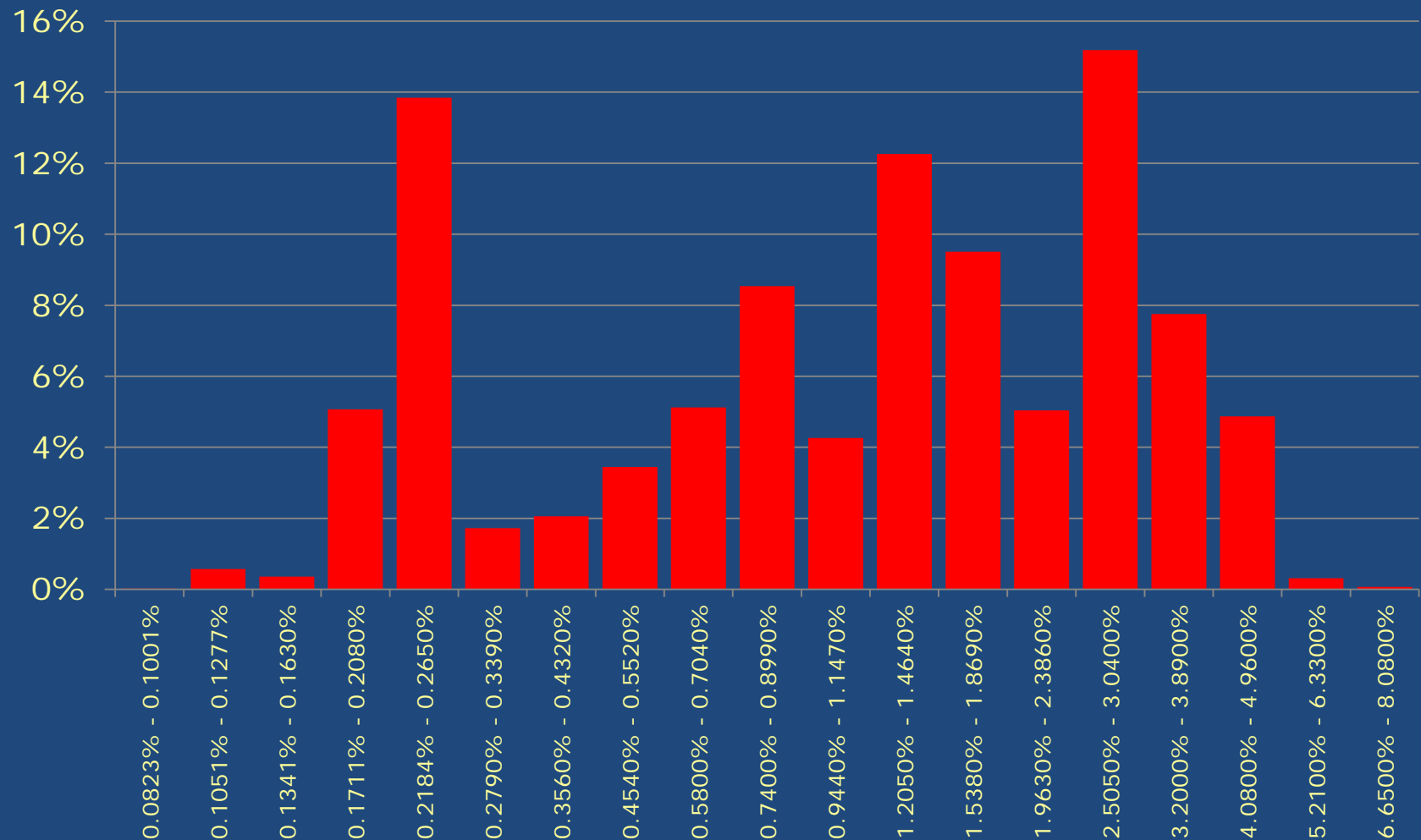
Concentration of premiums on companies, Suva, occupational insurance



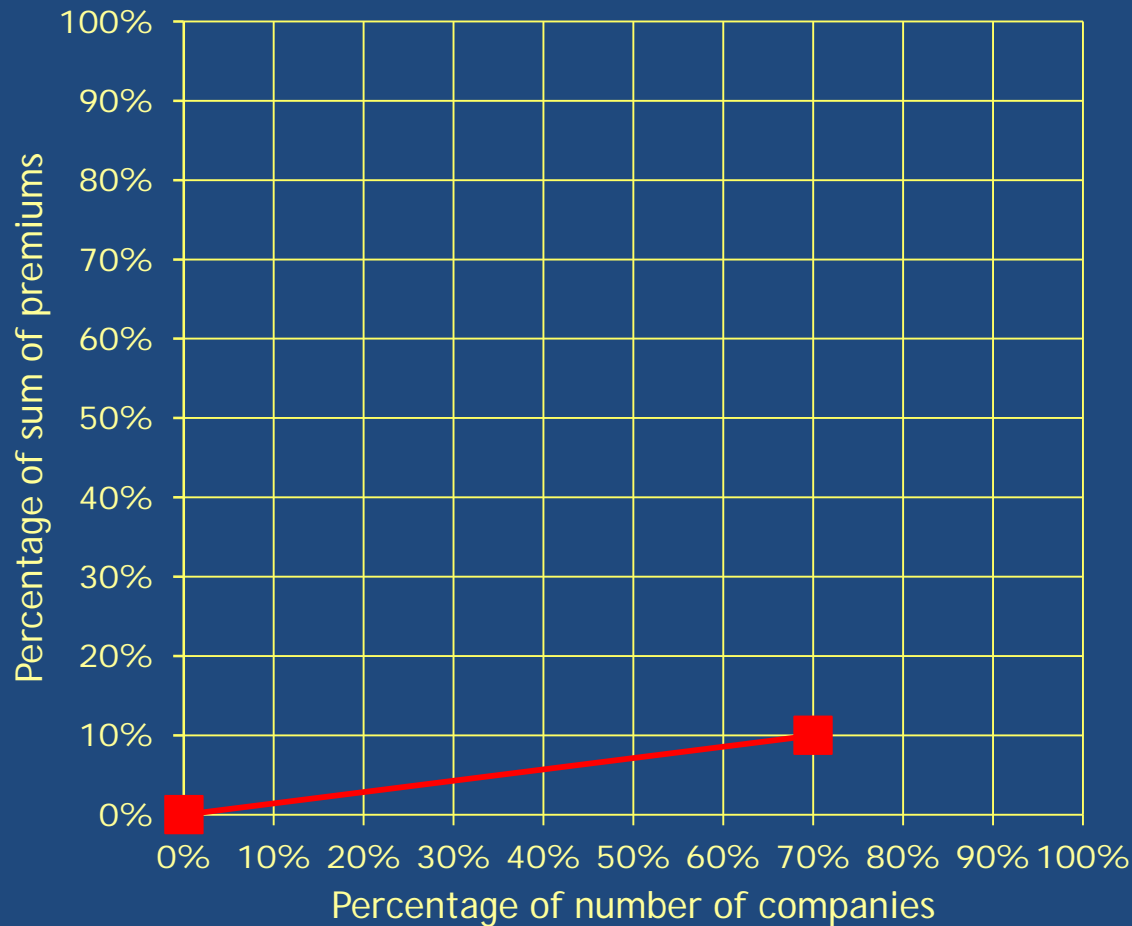
Almost 70 per cent of the companies are too small for experience rating and pay a premium depending only on the sum of salary and the **base-rate of their branch of industry**.

Too small for experience rating are all companies with an (normal) annual premium **below 5 000.- CHF**.

Relative distribution of companies (vertical axis) over base-rates of branches



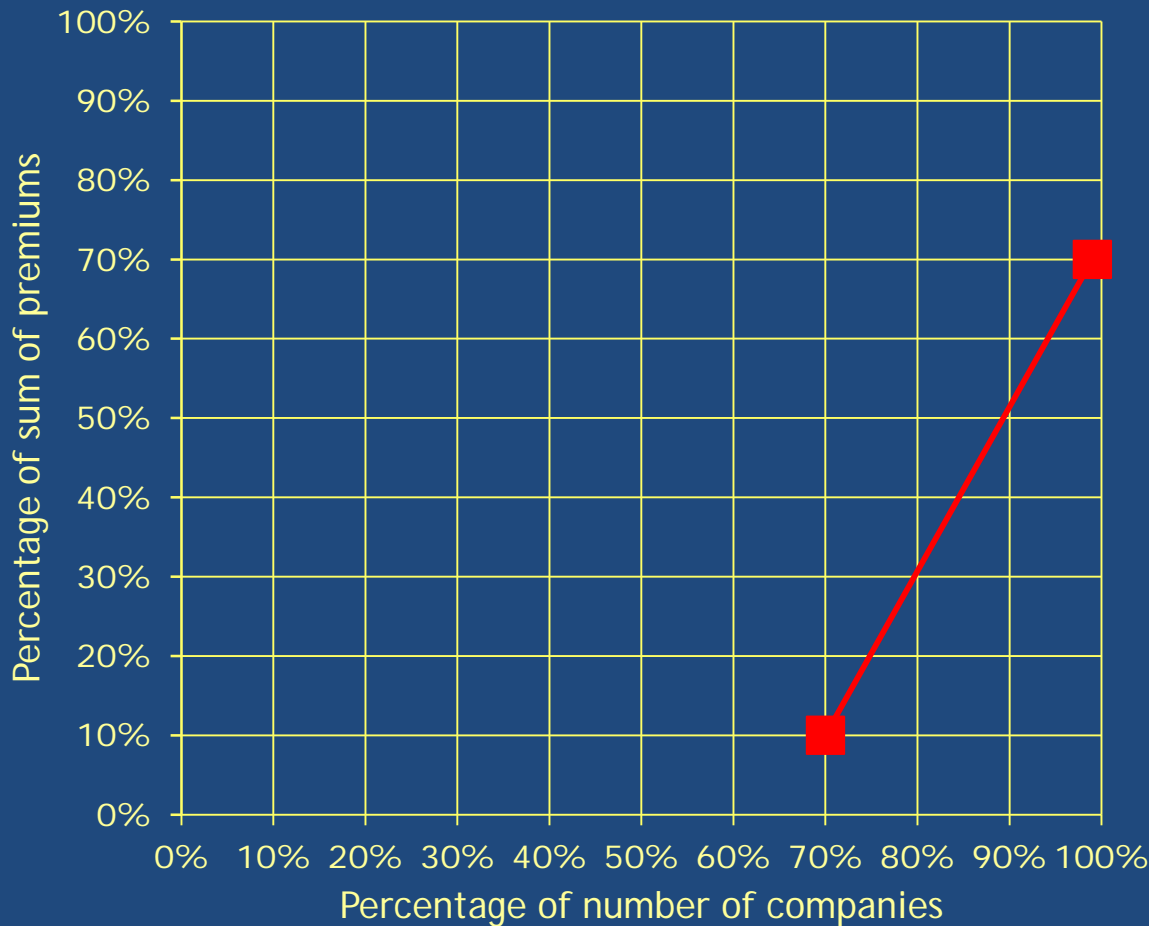
Concentration of premiums on companies, Suva, occupational insurance



A company with only one employee, operating in a high risk branch, may have the same (normal) annual premium of 5 000.- CHF as a company with 100 employees, operating in a (very) low risk branch.

There are no subsidies between branches.

Concentration of premiums on companies, Suva, occupational insurance

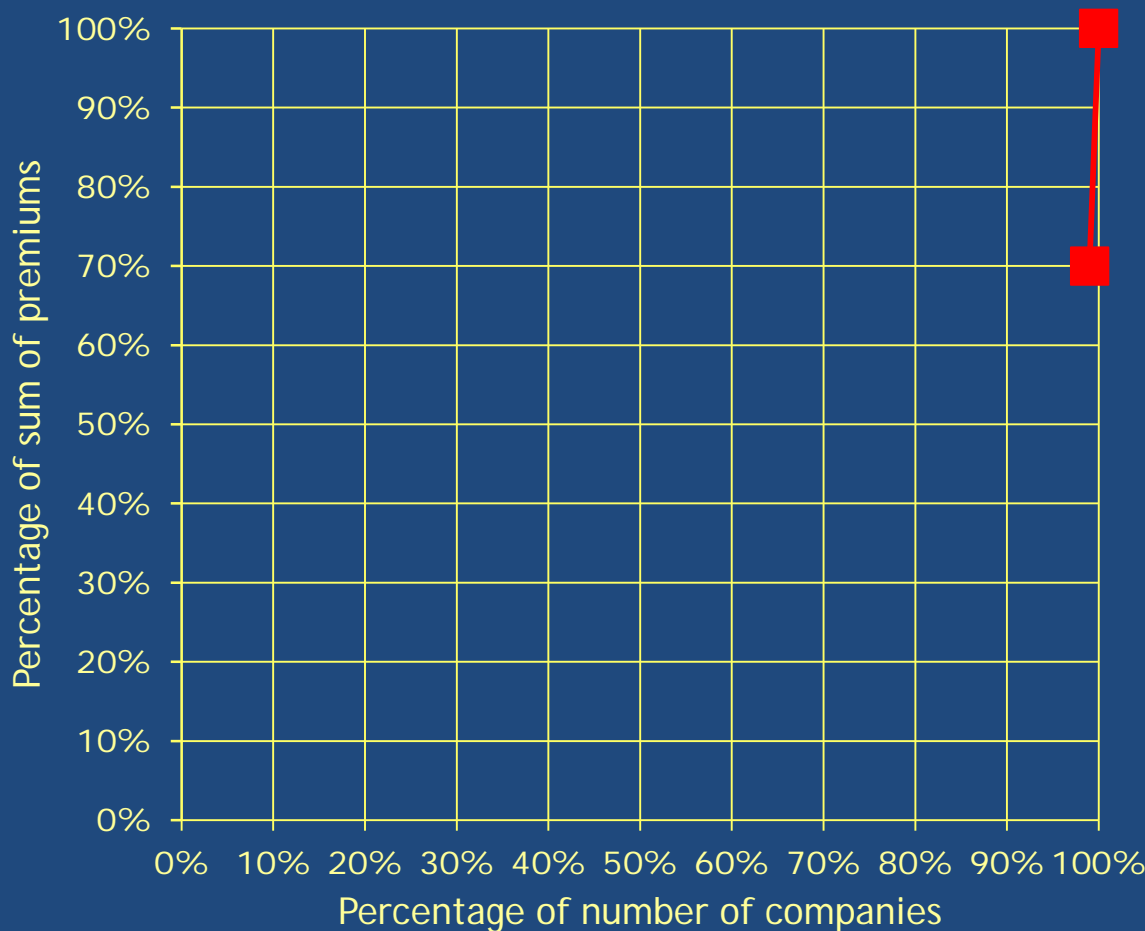


30 per cent of the companies pay 60 per cent of the premiums - and have a corresponding number of employees and accidents.

These companies pay, like the small ones, a premium depending on the base-rate of their branch.

In addition to that they can get a **bonus or malus** that lowers or raises the base-rate.

Concentration of premiums on companies, Suva, occupational insurance

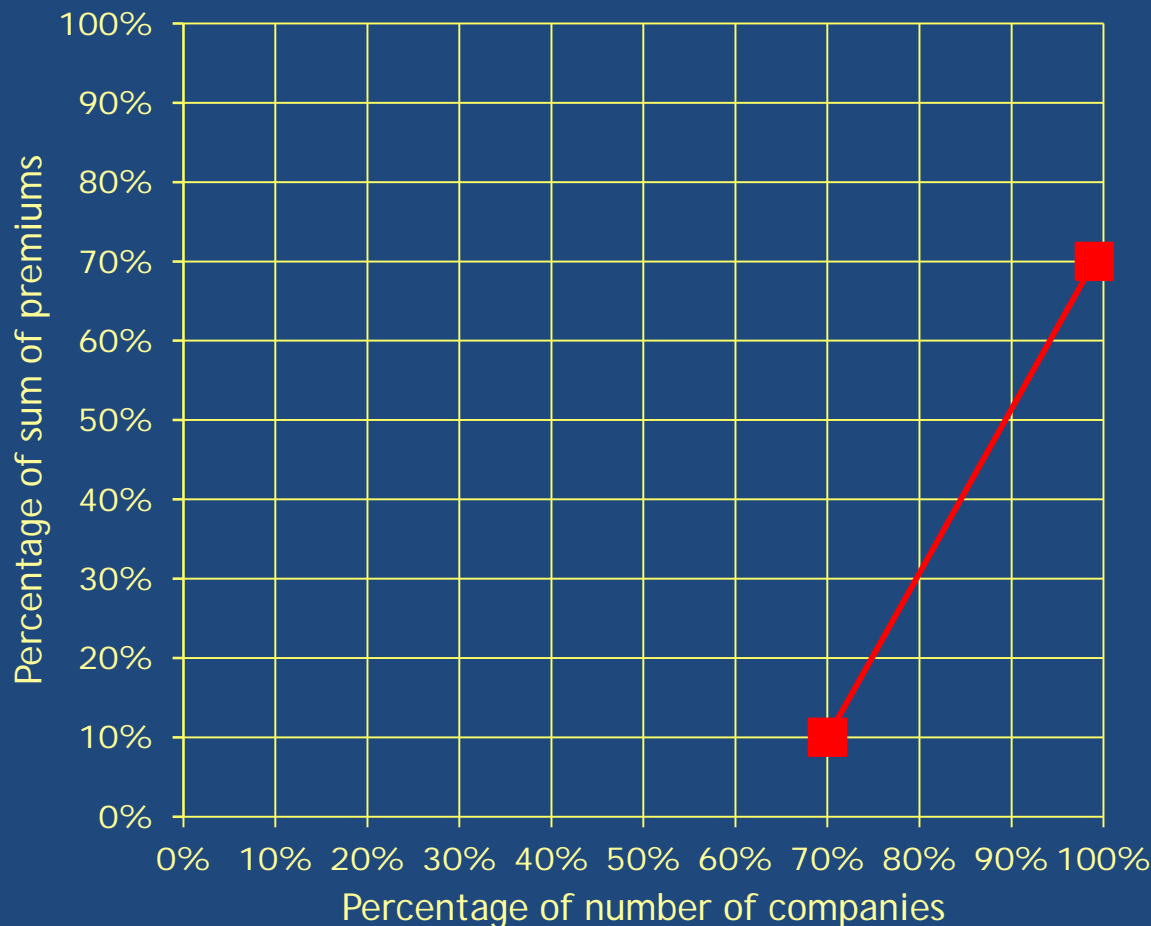


1 per cent of the companies pay the rest or 30 per cent of the premiums.

These big companies have many employees and accidents or credible experience and are therefore relatively **easy to rate by experts**.

The (normal) annual premium for these big companies is **300 000.- CHF** and more.

The Bonus-Malus-System (BMS) for small and medium companies in 5 steps



1. Calculate total expenses of the accidents of the last 6 years
2. Exclude expenses, for which the company is probably not responsible
3. Measure the differences between the risk rates of the company and the branch
4. Weight the differences
5. Define the premium-rate of the company

Step 1: Calculate the total expenses of the accidents of the last 6 years

To get the (most likely) total expenses of the accidents of the last 6 years, the provisions for the (expected) costs in the future must be added to the (already) known costs of the past.

The frequency of cases in principle does not matter.

Step 2: Exclude expenses, for which the company is probably not responsible

Expenses above the cut-off limits per case are excluded. As a side effect the frequency of cases still plays a role.

Occupational diseases and probable recourse cases are excluded too.

30 % of the expenses are so excluded.

Step 3: Measure the differences between the risk rates of the company and the branch

short-term risk rate: medical treatment and daily benefits

long-term risk rate: pensions

risk rate of company - risk rate of branch
= bonus or malus before credibility

Step 4: Weight the differences (or consider the credibility)

credibility for the short-term risk rate =
premium 6 years / (premium 6 years + k1)
 $0.250 < \text{short-term risk rate} < 0.96$

credibility for the long-term risk rate =
premium 6 years / (premium 6 years + k2)
 $0.016 < \text{long-term risk rate} < 0.5$

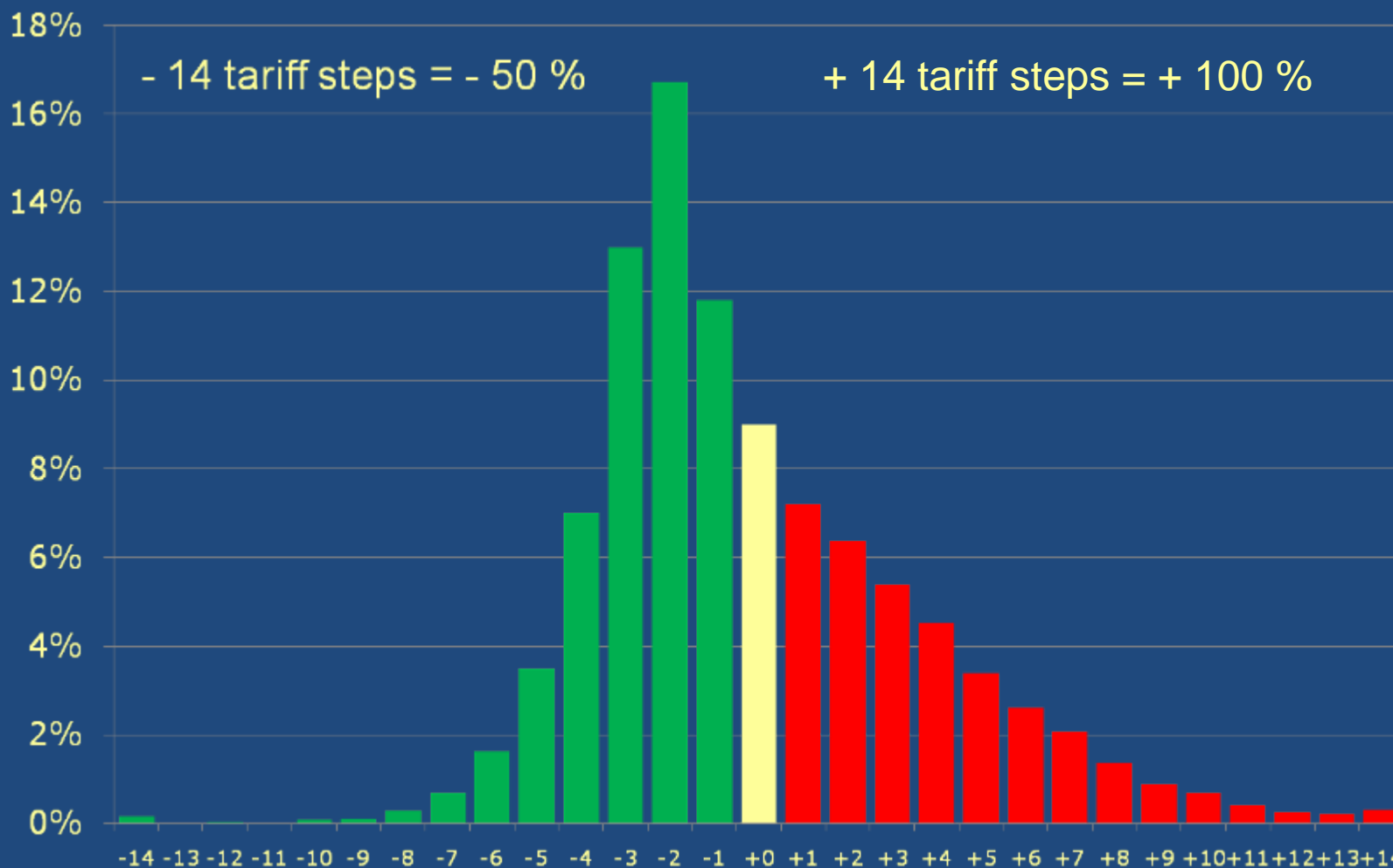
Step 5: Define the premium-rate of the company

rate of company = base rate + c_1D_1 + c_2D_2

1 step of the tariff is plus 5 per cent

The maximum change of the premium per year is +/- 4 steps in the tariff.

Distribution of premium-rates over deviation from base-rates in tariff steps



Final remarks - 1

In 1995 the (first) BMS was not primarily introduced to give incentives for the prevention of accidents, but to enhance the (political) acceptance of a general raise of the premium-rates following the economic recession of 1992 and 1993.

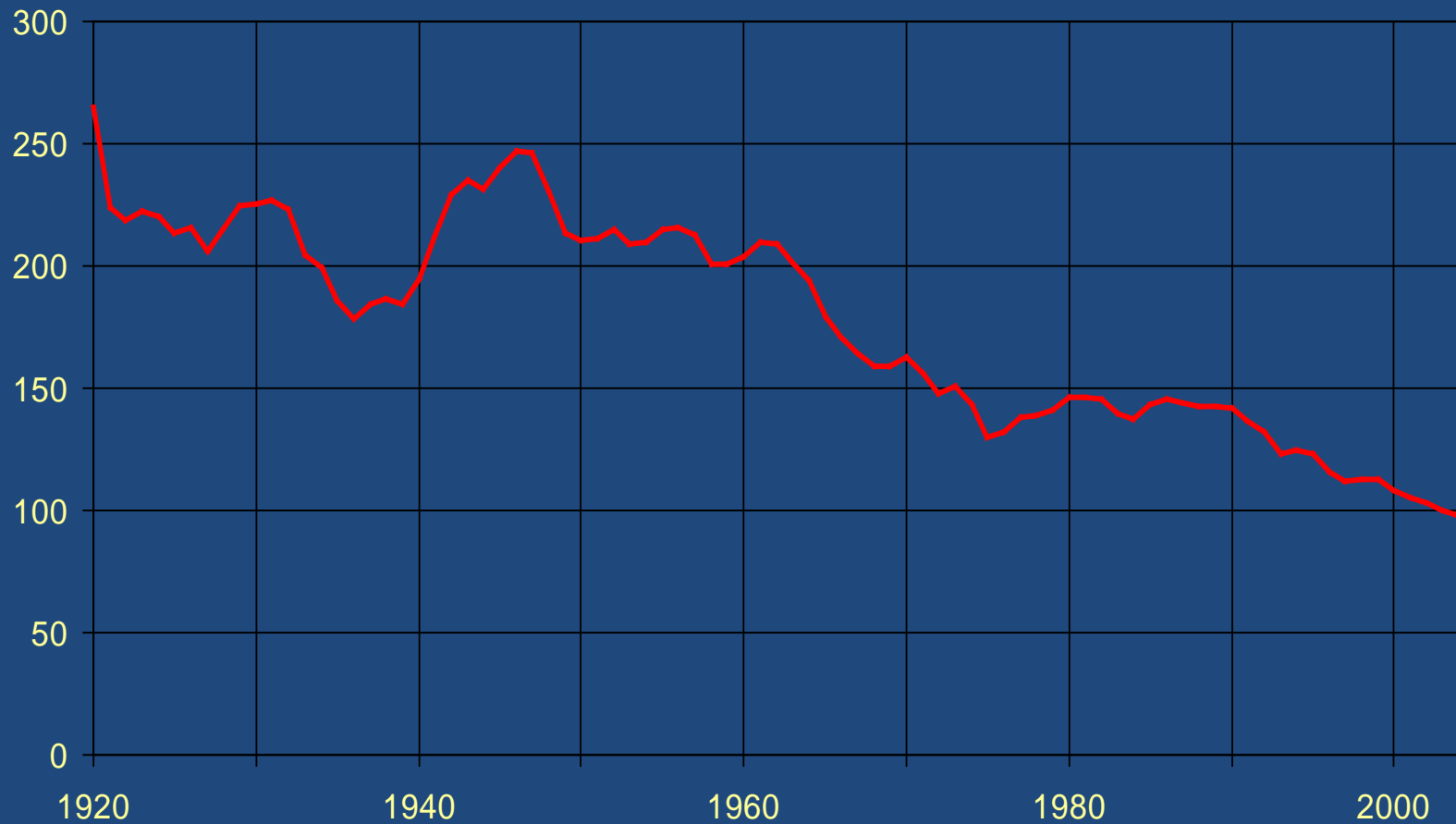
Companies, who had invested in prevention, didn't want to pay for the companies, who hadn't.

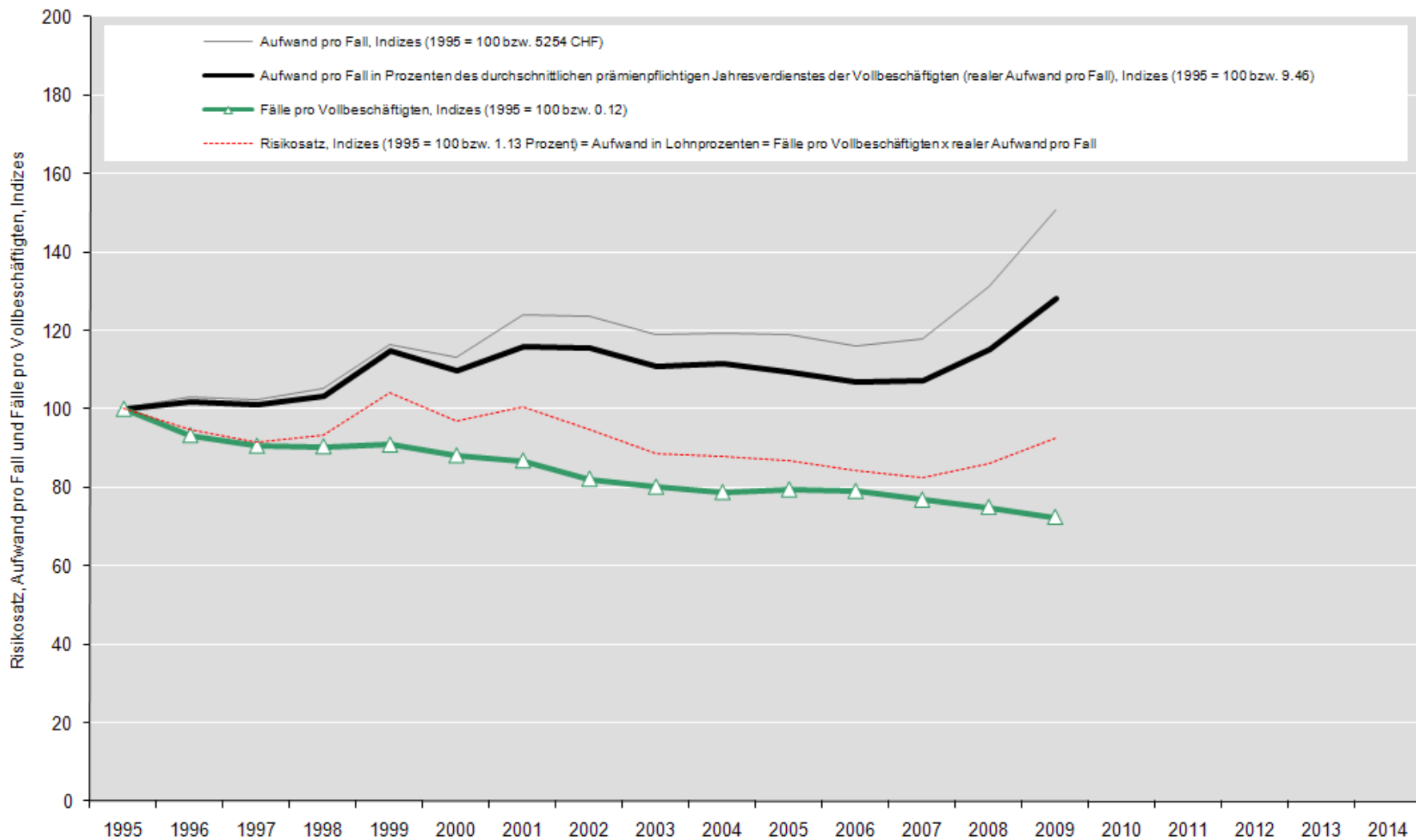
Final remarks - 2

There is no clear evidence, that the introduction of the BMS had an impact on the effective and/or reported number of accidents.

But it is probably very difficult, if not impossible, to find such an evidence with statistical significance.

Occupational accidents per 1000 FTE and year since 1920





Final remarks - 3

It would be interesting to compare the level and trend of the accident rates in Switzerland - with its different premium-rates - and in Austria - with the same premium-rate for all companies in all branches of industry.

Final remarks - 4

It may look strange, to have introduced in 2003 a BMS for relatively small companies, but the BMS introduced in 1995 rated even the smallest companies.

After decades with no BMS for small and medium companies at all and a few years with a too sensitive BMS, Suva made good experiences with BMS 03. **It works!**

Final remarks - 5

Dr. Olivier Steiger is charged to develop further the BMS and - if possible - to unify it with the system applied today for the one per cent of biggest companies.

One idea is to introduce **variable cut-off limits (caps)** for the expenses per case **in function of the size**: the bigger the company, the higher the cap.

Questions?