INSURING TRUST

SOCIAL SECURITY IN THE 21ST CENTURY
"THE PEOPLE WHEN RIGHTLY AND FULLY TRUSTED WILL RETURN THE TRUST."

- ABRAHAM LINCOLN
When the Chancellor of the German Empire Otto von Bismarck suggested health insurance, accident insurance and pension funds about 130 years ago, it was a time when the "social question", as it was called at the time, dominated public discourse. The transition from an agriculture-based economy to an industrial society caused mass unemployment and impoverishment in society, followed by social unrest. By means of his reforms, Bismarck wanted to prevent a revolution. So he created insurance systems to connect people to and make them dependent on the state.

Today, we face huge changes similar to those of the industrial revolution, and the connection of social insurance systems with the state is increasingly becoming a problem. The borders of the nation state are losing their significance for work and for life in general. For example, whole generations now have their residence in Poland and work in Berlin or London. Others are processing orders for international employers in the gig economy and do not fit into traditional labour patterns. Full time jobs and straight employment biographies are no longer taken for granted. Our social security systems are not adapted to this, and so people are still clinging to full time jobs or the typical employee relationship—a sign of their worries about the dependability and certainty of their employment.

However, this corresponds less and less to the present-day reality and to future labour markets.

This has been called the "Uberisation" of society, meaning that conventional rigid structures are dropped in favour of flexible employment relationships, which can be established for a few hours only. There are strong concerns about this—for example, Germany’s federal minister of labour and social affairs, Andrea Nahles, has said that "flexibility is not everything" and that a balance between flexibility and security has to be found. In the following case study, we want to outline ways, which could lead out of this dilemma. What kind of solutions do already exist today, enabling the coexistence of security and flexibility, with no boundaries either way?

A well-known solution for this is the basic income, which guarantees security for the individual while allowing maximum flexibility for the employment market. With the basic income, nobody is bound to a certain employment to get the benefit of security.

In this brochure, other solutions are presented, which could complement the idea of the basic income. These solutions have been known as "peer-to-peer insurances" or "solidarity-based communities".

Armin Steuernagel
Entrepreneur and economist, founder NEOPOLIS Network
The insurance industry handles a lot of cash flow, in Germany alone around 193 billion euro were paid in insurance premiums in 2015. The sector is often considered to be rather traditional, slow, and conservative. Nevertheless, 80 per cent of insurance managers see the key to the future of their industry in innovation, according to a study by KPMG, for which 280 insurance managers from 20 countries were interviewed. For five years now the sector has slowly but surely been gaining momentum. In 2011 the first peer-to-peer insurance model was brought on the market. Since then more than 20 companies in over 10 countries have launched or advertised a peer-to-peer insurance.

We took these new developments as an opportunity to examine the occurring changes in a thorough way. In a first step, we defined a sample of organizations that adopted a new course with respect to social security. We identified a number of new companies from the InsurTech industry, as well as solidarity-based communities that already implemented new insurance concepts over 25 years ago.

Eleven organizations were chosen for the current case study, whereof four are solidarity-based communities and seven are peer-to-peer insurance models. These two concepts differ from each other, but they also have many similar features. Both of them vote for a group structure involving flat mutual coverage of risks by the group members. The peer-to-peer insurances use digital and technical networking among their members. The solidarity-based communities rely on personal and analogue relationships among their members.

In a second step, we investigated how the approaches of peer-to-peer insurances and solidarity-based communities differ from those of regular insurance companies. As a result, it became apparent that the investigated companies follow principles that resemble those developed by Elinor Ostrom.

Ostrom, a Nobel Prize laureate for economics, analyzed how common goods can be governed in her book "Governing the Commons: The Evolution of Institutions for Collective Action". She found that institutionalized local partnerships outperform both, private ownership and state administration under certain circumstances. The design principles described by Ostrom as contributing to the success of such partnerships were used as basis for our case study². These principles were complemented by five further criterions specific to the insurance industry, for instance the solidarity principle and the extent of the risk coverage.

Finally, we analyzed how the chosen organizations implement the defined principles and criterions. This was done by means of interviews with the members of the organizations in the sample, as well as based on the information provided by the organizations. The results of the analysis are presented in this brochure in a table, the principles and factors developed by Ostrom are marked as such.

Lukas Kunert
Researcher

OVERVIEW OF INVESTIGATED ORGANIZATIONS
S. 8–15

THE THREE WAVES OF THE NEW INSURANCE

WAVE 1 DISTRIBUTION
INSPEER FRIENDSURANCE PEERCOVER

WAVE 2 CENTRAL GOVERNANCE BUT DECENTRALIZED GROUPS
CYCLESYNDICATE GUEVARA

WAVE 3 SELF GOVERNANCE MODEL
SAMARITA SOLIDAGO TEAMBRELLA COMMONEASY SOLIDARKUNST ARTABANA
## PEER-TO-PEER FOR DEDUCTIBLE COVERAGE

<table>
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<tr>
<th>ORGANIZATION</th>
<th>FOUNDATION DATE, HEADQUARTER</th>
<th>INSURANCE SEGMENT</th>
<th>HOW IT WORKS</th>
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<tr>
<td><strong>INSPEER</strong></td>
<td>February 2014, Paris, France</td>
<td>Motor vehicle and household insurance</td>
<td>Founded in February 2014, InsPeer launched a peer-to-peer model on the French market similar to the one proposed by Friendsurance. InsPeer has limited its services to the motor vehicle and household insurance sectors. The model implemented by InsPeer also involves purchasing policies with high deductible from regular insurance companies. However, the customers do not pay the saved money into a common pool but rather keep it. They use then the InsPeer platform to build partnerships with other members. When a member reports damage, he or she receives financial cover from his or her partners up to the amount of the deductible. InsPeer provides its platform services for free and only charges a fee amounting to 10% of the total loss in case of damage.</td>
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<tr>
<td><strong>FRIENDSURANCE</strong></td>
<td>March 2011, Berlin, Germany</td>
<td>Motor vehicle, household, cell phone, laptop, liability and legal expense insurance</td>
<td>Alecto GmbH is the first company to have brought a peer-to-peer insurance, Friendsurance, on the market. The company was founded in 2010 in Berlin and has made rapid progress since then. In 2015 alone Friendsurance gained 75,000 new customers in the sectors of motor vehicle, household, cell phone, laptop, liability and legal expense insurance. The insurance model is as follows. Friendsurance acts as an insurance broker and sells policies from regular insurance companies to its customers. The insurance policies sold by Friendsurance have high deductible but involve paying lower premiums. The money saved in this way is then paid by a group of customers of Friendsurance into a common pool. In case a member of a group reports damage, the group pool covers the costs up to the level of the deductible. If the total sum of the damage claim exceeds the deductible, the difference is paid by the regular insurance. If many group members suffer damage and the group pool runs out of money, the coverage of deductible is then provided by a reinsurer. If a group reports no damage or just few damage cases over an insurance year, the members of this group can get back up to 40% of the total premiums paid.</td>
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<td><strong>PEERCOVER</strong></td>
<td>April 2015, Richmond, New Zealand</td>
<td>Health, life and non-life insurance</td>
<td>PeerCover, a peer-to-peer company from New Zealand, offers its customers the possibility to use peer groups to cover the deductible part of the insurance policies in the sectors of health, life and non-life insurance. The customers purchase policies with regular insurance companies and can choose their deductible coverage level from $250 to $2000 at the PeerCover platform. In order to get a reimbursement for this deductible level in case of damage, each member pays one fifth of the chosen deductible into the group pool. This model allows sharing of costs of deductible resulting from different insurance sectors within one pool, though such a combination can lead to an uneven risk distribution within one group. PeerCover provides its platform services for free and only charges a fee amounting to $100 in case of damage.</td>
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### Guevara

July 2014, London, Great Britain

Motor vehicle insurance

Guevara was founded in July 2014 in London and is the first peer-to-peer insurance that does not demand that its members first get individual policies with regular insurance companies. Guevara offers exclusively motor vehicle insurance policies. Similar to regular insurance companies, Guevara calculates the base price for the policy based on such traditional insurance criteria as the age of the driver, the brand of the car etc. The members of Guevara join then an existing group or found a new group (min. 5 members are necessary for that). Unlike traditional insurance, a part of the calculated base price goes towards the group’s insurance fees, and the rest goes into the group’s protection pool. The way how exactly the premiums are allocated depends on the size of the group. Bigger groups need to pay less for insurance fees, meaning more money goes into the protection pool (up to 50%). In case of damage, the claims are paid for using the protection pool.

At renewal time, any money left in the protection pool stays where it is for the group to use next year. If within one insurance year many claims are reported and the protection pool runs out of money, the group’s insurance fees are used for extra cover. At renewal, the members of this group get no discount and have to pay the full base price. If no one makes a claim, all the money is left over and the group just pays their insurance fees at renewal.

### CommonEasy

2015, Utrecht, Netherland

Gadgets insurance, disability insurance

CommonEasy, a foundation located in Netherlands, offers its members the possibility to create their own insurance policies. The members can invite friends and family members to their groups in order to share the risk of damage to different gadgets, as well as the risk of disability. For this, each member of the group pays into the common pool which is then used for reimbursement. A particular feature of CommonEasy is that the claims are only paid for if each member of the concerned group agrees on payment. This means that well-balanced mutual trust should dominate the group; otherwise the group can become unable to act.

### CycleSyndicate

2015, London, Great Britain

Insurance against bicycle theft

Richard and Dillan, the two experienced professionals from the financial sector and passionate cyclists, founded in 2015 a peer-to-peer platform for coverage of risks of bicycle theft. At the CycleSyndicate platform, the cyclists can build groups with colleagues, friends or sport club members. The values of all bicycles insured within one group are added up, and for each group member, the proportion of the whole amount is calculated based on the value of his or her bicycle. This proportion is used as calculation basis for the case of theft. This means that if in one group the bicycle A (800€) accounts for 5% of the total bicycle value of the group (16,000€), and the bicycle B worth 1000€ is stolen, the owner of the bicycle A would pay 50€ for the purchase of a new bicycle B. Due to this approach, no money is unnecessarily accumulated in the group pools and payments are only done in case of theft.

### Teambrella

2015, international

All types of insurance which are not compulsory in the concerned country (e.g. no motor vehicle or health insurance)

Teambrella was founded by three Russian IT specialists and is the youngest of the organizations presented in this study. A particular feature of Teambrella is that it does not impose any rules or limitations on its members. The members can use the platform of Teambrella to build groups in order to share different risks, except for those with compulsory insurance coverage in the concerned country. It is up to the group to choose the risk coefficients of each group member, which are then used to calculate the peer-to-peer coverage. All decisions in the group are taken based on a voting process. The funds of each member are stored in a special personal Bitcoin wallet. The funds in the wallet can only be spent if both the member and three out of eight semi-randomly selected teammates co-sign a transaction. Team members can delegate their votes to other teammates, including insurance professionals. Since Teambrella is still in the test phase, no insurance fees are charged at the moment.
## SOLIDARITY-BASED COMMUNITIES

<table>
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<tr>
<th>ARTABANA</th>
<th>SOLIDAGO</th>
<th>SAMARITA</th>
<th>SOLIDARKUNST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987, Switzerland</td>
<td>May 2013, Heidelberg, Germany</td>
<td>December 1997, Bremen, Germany</td>
<td>2004, Freiburg Germany</td>
</tr>
<tr>
<td>Health insurance</td>
<td>Health insurance</td>
<td>Health insurance</td>
<td>Health insurance</td>
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Artabana, founded in 1987 in Switzerland, is the first solidarity-based community in the health care sector. Since 1999 Artabana operates also in Germany and counts over 2000 members. The community is based on a network of local groups involving monthly meetings of group members. This is the basis for confidence and security playing an important role in case of illness. If the latter occurs, the concerned person can first cover small costs using his or her personnel health fund. If the personnel fund runs out of money, the coverage can be provided by the health pool of the local group.

If in case of multiple serious diseases the local pool is completely used, the costs can be covered by the pool of the regional group (network of local groups). In extreme cases the coverage is provided by the federal association of all groups. This subsidiary system allows for honorary structure of the whole organization.

Artabana does not guarantee reimbursements, which rather need to be awarded by the group. The premiums can be freely chosen by the members, though Artabana advises to adjust the premiums based on the sum of expected costs (60%) plus an additional solidarity premium (40%). Artabana puts a special emphasis on the free choice of therapy by the members.

Solidago is the youngest of the solidarity-based communities in health care sector and operates in a similar way as Artabana. It has also a subsidiary organization structure and allows for free choice of therapy. Both communities differ from each other with respect to the way how reimbursements are awarded. By contrast to Artabana, at Solidago a chosen trustee decides on reimbursement based on a system of standardized transparent criteria. The premium depends on the member’s gross income and currently amounts to 10% of it.

In total Solidago has 26 local groups with 5 to 50 members who meet each other monthly in order to build mutual confidence and cope with such questions as, for instance, patient decrees.

Samarita, founded in 1997, is the first German solidarity-based community. It also operates in the health care sector, but compared to Solidago and Artabana it has adopted a different course. Samarita also has a decentralized group structure, but the administration tasks and the control over all financial funds are performed by the professionals in the headquarter in Bremen. The local groups primarily aim at the development of the social network of Samarita, at knowledge transfer and dealing with fundamental issues.

The premium depends on the member’s gross income and on the number of teammates. Half of the premium goes towards the individual account of the member; the other half goes into the group’s solidarity fund. In case of disease, the concerned member can first cover the costs using the individual account, though this is regulated by a formalized set of rules. If the individual account runs out of money, the member can request support from the solidarity fund. The executive board of Samarita decides then on the reimbursement. The formalized rules are to be respected, but in some cases the board can deviate from the rules in favor of the concerned member. For the cases of large losses, Samarita is backed by an umbrella organization, BASSG.

Solidarkunst with its 45 members is the smallest of the presented solidarity-based communities. Solidarkunst can only cover small and medium risks in the health care sector. For the coverage of larger risks, the members are insured with regular insurance companies. Solidarkunst puts a special emphasis on financing of naturopathic and artistic therapies. The premiums can be freely chosen by the members, however Solidarkunst advises to determine them based on the member’s financial means and expected needs. All premiums are paid into a common group pool which is managed by a financial board. Small claims can be processed very fast, whereas the coverage of medium risks depends on the decision of the financial board based on the current means of the group pool. Solidarkunst operated only in the region of Freiburg. There are at least two meetings of stakeholders per year used to discuss all issues relevant for the group.
1. Confidence building mechanisms are used to prevent fraud. (5th factor, Ostrom.)

There can be identified significant differences with respect to the development of confidence building mechanisms. However, the majority of investigated organizations believe confidence to be a highly important factor.

All solidarity-based communities use institutionalized confidence building mechanisms which mainly involve regular face-to-face meetings.

All other organizations, with the exception of Fiendsurance and Teambrella, advise to build groups consisting of family members, friends and acquaintances.

2. No obligation of redistribution exists due to equal premiums or premiums that can be freely chosen by the members.

The problem of choice of premium model is treated in different ways. Many of the analyzed organizations use traditional actuarial parameters to calculate the premiums. Some organizations use models with one-to-one coverage, such that members of the same group provide each other with same amount of money in case of damage.

The premiums at Solidago and Samarita depend on the member’s gross income. Artabana and Solidarkunst allow the members to choose the premium on their own, though it is suggested to align it on the sum of expected costs and solidarity premium.

3. Extension of the insurance over a purely monetary coverage (non-cash benefits, personal contacts).

Solidarity-based communities always offer more than just monetary coverage of costs in case of claim. They put a special emphasis on the knowledge transfer, personal support and contacts.

Peer-to-peer insurance organizations tend to limit their service to monetary coverage of risks, though knowledge transfer is also possible in some cases.

4. Solidarity principle: support of affected members by those who are not affected.

The solidarity principle is applied in absolutely all investigated organizations. However, there are significant differences regarding the way how this principle is implemented. Only Fiendsurance and Guevara treat the claims as legally guaranteed.

Other peer-to-peer insurances award the reimbursements; the latter are not guaranteed.

Members of solidarity-based communities mainly have access to private pools that can be used without any limitation. If such a pool runs out of money, the affected member can ask the group for financial support. In this case the group or the chosen board of members take the decision whether the reimbursement should take place and what amount should be paid out.

5. The boundaries and the members are clearly defined. (1st principle, Ostrom)

All investigated organizations clearly define the circle of the members. Some organizations automatically include the coverage of a member’s family into the policy. Only Solidarkunst sometimes supports outsiders in need.

6. The rules are adapted to the specific local conditions (region, mentality, legal aspects). (2nd principle, Ostrom)

The decentralized structure of solidarity-based communities allows the groups to adapt to local conditions. The majority of peer-to-peer insurances have adjusted their rules to the specific requirements of the countries in which they operate. Teambrella is the only organization which is not anchored in a specific country but rather operates internationally. This can be demonstrated by the fact that all cash flows of Teambrella take place at Bitcoin. Due to the group structure proposed by Teambrella enabling the groups to decide on all insurance functions and rules, each group can easily adapt to the local conditions.

7. Group members can decide on community/group rules. (3rd principle, Ostrom)

Friendsurance, InsPeer, Guevara and PeerCover do not offer their members the possibility to influence the group rules.

Solidarity-based communities as well as CommonEasy and Teambrella are organized in such way that the members can participate in a democratic decision-making process with regard to the community rules.

8. Monitoring of members by each other or by monitors accountable to the members. (4th principle, Ostrom)

In the solidarity-based communities monitoring is mainly performed via regular face-to-face meetings in small groups. This kind of monitoring is normally not perceived by the members as negative.

Peer-to-peer insurances that only cover the deductible (Friendsurance, InsPeer and PeerCover) mostly rely on claim assessment performed by the regular insurance carrier.

At Guevara there is a central department which is responsible for the monitoring function. Other peer-to-peer insurances let the groups monitor the members by themselves.

CycleSyndicate offers its members monitoring services in case of suspected fraud.
9. A scale of graduated sanctions can be applied to the members who violated the rules by the group or by chosen representatives. (5th principle, Ostrom)

Peer-to-peer insurances have no defined mechanisms of conflict resolution or provide no information about those. Teambrella is the only organization which specifies that conflict management is the responsibility of the groups. However, Teambrella provides no tips on how the possible conflicts could be solved.

Solidarity-based communities try to solve conflicts through communication and open dialog. In addition, Artabana and Solidago have built a network of mediators who help deal with conflicts if needed.

10. There are mechanisms of conflict resolution that are cheap and of easy access for different parties involved into a conflict. (6th principle, Ostrom)

Many of the investigated organizations have not defined a structured system of sanctions or have not clearly presented those in their materials.

Friendsurance, InsPeer and PeerCover apply only one sanction, which is contract cancellation in case the regular insurance carrier also cancelled its contract with the member who violated the rules.

Solidarity-based communities opt for open discussions about the possible sanctions and try to find the best solution for all parties. Finally, the involved group takes the decision about the handling of each rule violation case.

InsPeer penalizes rule violation by lowering the trust rating of the responsible member. A low trust rating would then have a negative impact on the further participation of this member in the cost sharing with other members at the InsPeer platform.

11. Self-determination of the community is recognized by external state authorities. (7th principle, Ostrom)

Keine Solidargemeinschaft hat eine Anerkennung durch eine externe staatliche Behörde, wie auch die meisten der Peer-to-Peer Versicherungen nicht.

Ausnahmen sind Friendsurance, InsPeer und Guevara, welche staatlich anerkannt sind.

12. Subsidiarity principle: the principle of „nested enterprises“ is valid if groups or organizations are part of larger group or organizations. (8th principle, Ostrom)

Artabana and Solidago have both a subsidiary structure with multiple layers of nested units. This means that when a small local group at the base level runs out of money, a network of the next level would cover the costs and so on. Each member of Samarita has access to an individual fund, which is first used to cover the risks. If an individual fund is empty, the costs are then covered by the solidarity pool. The coverage of larger risks is backed by a reinsurer. All other investigated organizations have no multiple layer structure. Some of them are backed by a reinsurer for the cases where the group pools run out of money.

13. The organizations aim at providing insurance services and/or cost reduction to the members and not at profit maximization.

All analyzed organizations aim at providing insurance services and/or cost reduction to their members. All security-based communities are non-profit organizations. All of them, except for Solidarkunst, are registered associations. Solidarkunst is a partnership under civil law („GbR“). CommonEasy is also non-profit and its legal form is foundation.

Teambrella is currently providing its platform services for free. Friendsurance operates for profit and generates its revenues with a non-transparent brokerage fee. The other organizations have a very transparent cost structure. They either collect annual membership fees or a claim handling fee which is then defined as a percentage of claim amount or a fixed charge.

14. How large can be the covered risks?

Solidarkunst covers all small and medium risks of healthcare provision. Artabana, Solidago and Samarita cover all events of illness, regardless of the level of costs.

Guevara provides coverage for all costs associated with automobile accidents.

CycleSyndicate covers all costs resulting from bicycle thefts.

Friendsurance, InsPeer and PeerCover cover all deductibles up to 2000€.

CommonEasy insures self-employed people against disability lasting up to one year.

Teambrella does not define which risks can be shared at the platform. However, Teambrella indicates the necessity to respect legal regulations of the country concerned, for instance with regard to mandatory insurance requirements.
IN OUR OPINION, THE MODELS ANALYSED IN OUR STUDY SHOW INTERESTING SOLUTIONS TO THE CHALLENGES AND TRENDS IDENTIFIED IN THE PREFACE:

- Flexibilisation of the working world;
- Mobilisation of employees across frontiers.

For instance for solidarity groups it is unimportant whether someone works in Germany but consults a doctor in France or in Switzerland—which is impossible with traditional health insurance. Fast changes in workplace and the disappearance of fulltime-jobs, which have become normal for instance for clickworkers, cause no problems for such forms of solidarity. They can offer security as well as flexibility which tradition systems, that are linked to boundaries of national states, cannot supply.

In this context it is interesting to look at the already mentioned industrialisation around 130 years ago. Back then employees were also confronted with growing flexibility on the labour market. Instead of becoming a farmer and being a farmer for a whole life people moved into cities, worked in factories, were and needed to learn skills for new jobs. Unemployment became a new problem for those who lost their jobs, because the safety net of a tightly knit community did not exist in the cities. This flexibility, and the appearance of social issues such as unemployment lead to the need of new solidarity systems beyond the traditional family solidarity. Around 6000 solidarity systems existed and had emerged before Bismarck made this decentralised system redundant by introducing state-welfare systems. His aim was to position the state as the “friend of the workers” in insecure times and to prevent revolutions.

Once again we find ourselves challenged to by the question of what social security might look like in the future. Systems that adjust quickly to changing individual needs are needed. Our case studies show that once again many bottom-up solutions are being created, similar to the late 19th century. We will observe and analyse how these approaches develop and if they become accepted on the market. However, it is likely that representatives of the state will consider introducing centralised solutions as well. The question is whether a centralised solution is the best solution to the challenges of our time. Perhaps the time has come for more decentralised, more democratic bottom-up entities that can be steered and overseen by people who are directly affected. The Neopolis Network will investigate these questions in the coming years.