Corporate tipping points at the moment of insolvency

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Intro: past work at the university of Groningen
Several names for the research field:

- Financial distress
- Corporate turnaround
- Corporate recovery
- Insolvency
- Bankruptcy

It is a multidisciplinary research field.

- Financial distress
- Corporate turnaround
- Corporate recovery
- Insolvency
- Bankruptcy
It’s also a high impact research field.

- All companies come to an end, and it’s not because they get just happy old.
- We study often healthy companies, but maybe there is more to (l)earn in crises.
- Labor force involved.
- Resources involved.
- The size is large.
- Key to innovation.

Situation: the parties involved:

- Owners
- Employees
- (Swedish) House banks
- Creditors/Debtors
- Suppliers
- EE / EU / Tax
A closer look at the situation:

Who is the runaway? Who is the winner? What’s best for Estonia?

(Swedish) House banks
- Creditors / Debtors
- Suppliers
- Owners
- Employees
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Situation (2): dynamics of the business cycle

Are business cycles getting shorter or faster?
Consider fluctuations stem from an external shock, such as a technical innovation.
The complex business cycle

It follows that each recession—like an unhappy family in Leo Tolstoy’s Anna Karenina—is “unhappy in its own way.” Each “cycle” is the result of a set of unique circumstances and shocks.

This very powerful idea explains a lot of the mystery of business cycles—especially the unpredictability and complexity.

Problem description

How to understand and improve the ending and the new start of a business?
How to recycle whole companies fast & efficient
Why should we recycle companies?

Saving resources: capital and free up labor.
Speed up innovation and we preserve knowledge.

Research on the tipping points in Insolvency:

1. Agent based computer simulation
2. ADR Alternative Dispute resolution
3. (Semantic) blockchain
My first research (1): Describing the complex tipping points just before bankruptcy using agent-based modeling.

- The behavior of these systems is determined by many actors, situated in a dynamic, multi-actor, multi-objective and multi-level environment.
- Capturing and modeling the socio-technical complexity.
- Agent-based modeling is a proven approach to handle this challenge.

Challenges using agent-based modeling.

- The simulations are hard to validate
- Acceptance
- New languages mean new programmers. AnyLogic (MASON, Repast).
- Restarting the simulations
View the crisis or turnaround as a conflict
Then use conflict resolution or mediation theory
The ‘big bang’ moment analyzed bottom-up by studying the behavior of the players in the field.

What is Mediation / Conflict Resolution / ADR?
Mediation is a proven structured approach to analyze wants and needs of parties involved in a conflict.
Mediation/ADR provides a set of tools and techniques for efficient interventions.
Mediation (ADR) is popular and efficient.

A new and popular profession within the EU / US

The European Union actively promotes methods of alternative dispute resolution (“ADR”), such as mediation. The Mediation Directive was to be implemented by May 2011 and is now applied in the Member States.

Embedded in the legal system. Suitable for pilots and subsidies are available.

An alternative, more efficient, way to solve conflict than the legal system.

Elements of mediation:

1. Gaining trust
2. Communicate properly
3. Map wants and needs of the actors
4. Generate alternatives (Plan B)
5. Gain commitment
Mediation theory/techniques example 1:

**ZOPA:** The zone of possible agreement.

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Mediation example 2:

**5A's Every person needs.**

1. **ATTENTION:** genuine interest/curiosity.
2. **ACCEPTANCE:** Approval. unconditional yes. “the glance of mercy,”
3. **APPRECIATION:** Wow, I respect you!
4. **AFFECTION:** To give and receive love is our primary need.
5. **ALLOWING:** Knowing it is safe to be myself. Forgive and be bilateral.
Mediation communication techniques:

- Peeling: I want 100,000 Euro!
- Relabeling
- Reflecting
- Asking

Describing and Handling emotions: are you angry?
Making stories from emotions.

Group dynamics

Negotiating techniques

Harvard method: A framework for professional negotiations based upon wants and needs and with structure.

Measurable, more alternatives, more to the facts, not on the person
Using the power of blockchain technology, that brings economic, social and technical thinking under 1 roof.

The Blockchain Will Do to the Financial System What the Internet Did to Media. HBR 4/2017

**Proposed research(3):**

**Building a blockchain: Trust machine in crises.**

Using the power of blockchain technology, that brings economic, social and technical thinking under 1 roof.

The Blockchain Will Do to the Financial System What the Internet Did to Media. HBR 4/2017

**Blockchain described.**

Blockchain is a common ledger of transactions, distributed across a network of databases with no central control.

Cut out the middleman: There is no central database as everything is distributed, “public”, synchronized and encrypted. All transactions are logged

Blockchain ‘databases’ are all about trust and compliance.
Why building the blockchain technology for corporate recovery?

Improving and important core of the economy, using current laws and new technology. Creating a public fintech for a public cause.

Thank you!

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