I. INTRODUCTION

This article summarises the perspectives of a select group of promising young people from all over the world, the so-called Leaders of Tomorrow, on the topic of the 42nd St. Gallen Symposium, "Facing Risk". Based on an analysis of the top 50 contributions to the 2012 St. Gallen Wings of Excellence Award of this year’s St. Gallen Symposium, the article organises the focal topics of the essays and identifies interesting ideas and thoughts of the Leaders of Tomorrow. The objective is twofold. Firstly, to report on those ideas that the Leaders of Tomorrow most frequently address in their essays. Secondly, to highlight the most promising ideas of this cohort. This summary considers the top 50 contributions to this year’s St. Gallen Wings of Excellence Award. This choice was made in order to focus on those contributions with the highest quality. It is important to note, however, that this summary does not assess the quality of the essays, but solely focuses on the content of the contributions.

The review proceeds with some general information on the Leaders of Tomorrow’s favorite topics. Since the participants had to relate their essays to one of four clusters, this summary presents the content foci, contextual aspects and methodological approaches accordingly. The article concludes with a summary of the overall implications.

II. THE LEADER OF TOMORROW’S PERSPECTIVE

The participants in this year’s St. Gallen Wings of Excellence Award had to select one of four subtopics / topic clusters for their essays:

- Cluster A: Detecting Risks
- Cluster B: Risk Aversion
- Cluster C: Emerging Risks
- Cluster D: Managing Risk

Since most essays submitted to a specific topic cluster had corresponding topic foci, this review is organised accordingly. Of the top 50 contributions, 3 essays related to Cluster A, 11 essays to Cluster B, 24 essays to Cluster C and 12 essays to Cluster D. As illustrated in Table 1, the distribution of the top 50 essays among the four topic clusters is largely representative for all essay entrants.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>All Award Entrants</th>
<th>Top 50 Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster A</td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>Cluster B</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>Cluster C</td>
<td>43%</td>
<td>49%</td>
</tr>
<tr>
<td>Cluster D</td>
<td>28%</td>
<td>25%</td>
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</tbody>
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Table 1: Distribution of Essays among the Four Topic Clusters

II.1 Cluster A: Detecting Risks

Only a few essays focus on Cluster A “Detecting Risks”. Here, the Leaders of Tomorrow were asked to discuss how business practitioners and politicians can detect and assess risks in an appropriate manner in a global environment characterised by increasing complexity, extreme uncertainty and a high degree of volatility. The contributions of the Leaders of Tomorrow offer some stimulating ideas on how to better detect risks from different perspectives.

The Leaders of Tomorrow argue that the global environment has not only become more uncertain and volatile, but also more complex and interconnected. As a result, emerging risks are increasingly unanticipated and opaque, making their timely detection more difficult. Particularly, one Leader of Tomorrow takes a business perspective and argues that firms’ conventional approach to scenario planning fails to detect risks effectively and turn these into opportunities. The author suggests a rediscovering of “the entrepreneurial strength of scenario analysis” by focusing more on the world of perceptions than the world of facts” to challenge the mind-set and preconceived reality of managers. Another Leader of Tomorrow addresses the increasingly complex and interconnected global landscape from a policy maker’s perspective, arguing that “risk detection requires not just ex ante analysis, but greater use of parallel, incremental policy paths”. Drawing on the example of China, the author shows that the “Chinese geographically sequential diversified policy path permits better risk detection than the Western universally simultaneous, focused policy path”.

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A further essay presents a model for the analysis of a particular type of risk, namely the risk of induced CO2 emissions for municipalities in the Netherlands. Taking a distinct approach to estimate the risk of CO2 emissions, the author introduces the “Climate Value of Cycling (CVoC)” which is based on an estimation of the difference in CO2 emissions when a specific cycling trip is substituted by another transportation mode such as cars. Employing this method, the model quantifies the reduction of CO2 emissions when bicycles are used and, inversely, estimates the risk emanating from the urban transport system when cycling decreases, revealing the level of risk of induced CO2 emissions for each municipality. The Leader of Tomorrow concludes that “policy responses [of the municipality] can be suggested based on the level of sustainability of the urban transport system”.

II.2 Cluster B: Risk Aversion

Every fifth essay relates to Cluster B “Risk Aversion”. The Leaders of Tomorrow were asked to discuss the long-term consequences of increasing risk aversion for the economy and society. Specifically, the essays focus on the concept and sources of (increased) risk aversion, portray general consequences of risk aversion, and, to a lesser extent, provide recommendations of how to deal with it.

The concept and sources of risk aversion

A first strand of essays in Cluster B focuses on the concept and sources of risk aversion. The Leaders of Tomorrow draw upon concepts in the existing literature from different fields, as well as on personal experience.

The approaches to conceptualise risk and risk aversion vary widely. One Leader of Tomorrow demonstrates by building upon the work of Ulrich Beck and Anthony Giddens that risk is “an integral component of modernity and the hallmark of a future-oriented society without which progress would not be possible.” The author proceeds with an elaboration on how the concept of risk has changed over the past few years and “how the particular kinds of risk we currently face may instill a certain hesitancy to act, for fear that the remedy may be more risky than the disease.”

The Leader of Tomorrow concludes that risk is an essential part of human behavior. Another Leader of Tomorrow argues that risk aversion is taught to people as children as an expression of conformity with the existing society. The author argues that risk-taking is limited to rich people and, somewhat contrary to other essays, to the micro-financed poor. The author particularly identifies a lack of trust in young talent (e.g. on the part of banks and venture capitalists) and the incorrect manner in which society deals with failure as causes of risk averse behavior.

Two particularly notable essays use the recent nuclear disaster of Fukushima, Japan in 2011 to illustrate facets of the concept of risk. First, one Leader of Tomorrow uses the example of Fukushima to portray a “system of risk”. In the essay, it is proposed that education of the right values is critical. A second essay uses the example of policy decisions against nuclear power in Western Europe following Fukushima to illustrate the difference between scientific and societal risk – the latter defined as the perceived inability to cope with the consequences of our actions. The Leader of Tomorrow warns that “if we become incapacitated by an inability to take risks, then we leave little room for our generation to adapt, translating to a smaller choice set for the future”.

Focusing on the sources of risk aversion, one Leader of Tomorrow identifies four “drivers of risk aversion”: the stronger incentive barriers in developed countries, the negative incentives of social security (exemplified by the US), the VISA restrictions, a societal trend towards risk aversion. A best-case scenario and worst-case scenario for the future is presented for each of the drivers.

Consequences of risk aversion

Another strand of essays in Cluster B discusses the consequences of (increased) risk aversion. The Leaders of Tomorrow use a variety of different examples and contexts to present their thoughts on the topic. Perhaps most notably, almost all Leaders of Tomorrow agree that increased risk aversion may have primarily negative consequences for the economy and society.

Using Japan as an example of a saturated and wealthy society, one Leader of Tomorrow argues that, if the trend towards increased risk aversion continues, this would lead to a society with no innovation, no diversity, and a lack of visionary leaders. Furthermore, focusing on the economic consequences of risk aversion, another Leader of Tomorrow suggests that, in the long run, risk aversion could affect growth, the unemployment rate and the balance of payments stability and thereby lead to slow economic growth/a stagnating economy. The author proposes “peer recommendations” and “collectivism” as solutions to the negative long-term effects.

Two further essays focus on specific settings to highlight their ideas. One Leader of Tomorrow discusses why the poor in India are risk-averse towards investing in financial security schemes. The author argues that the lack of trust of India’s poor has resulted in a higher level of risk aversion. The author illus-
trates that there are severe negative consequences associated with this risk aversion. It leads the poor to make even more risky choices and may also affect people’s attitudes towards other long-term investments such as education. This may ultimately lead to societal and entrepreneurial stagnation. A further contribution uses the example of university endowments to illustrate risk taking and risk aversion. By discussing the spending policies and asset allocation decisions of endowments, the author highlights the pros and cons of risk aversion and the difficulty in balancing short-term and long-term goals.

**Recommendations for dealing with risk aversion**

A third strand of essays in Cluster B provides recommendations on how to deal with increased risk aversion. For example, drawing upon an analysis of the main causes of risk aversion in organisations, one Leader of Tomorrow proposes seven measures that organisations should implement in order to encourage risk taking: (i) increase investment in research and development; (ii) reward action, not only outcomes; (iii) become more organic; (iv) invest in human resources; (v) adapt to the latest trends and technologies; (vi) eliminate greed; (vii) apply long-term thinking to every part of the business.

Two other contributions offer two interesting examples of how to deal with risk aversion in specific cases. Firstly, while debating gender-specific differences in risk-taking behavior, one Leader of Tomorrow proposes a “three-step model to overcome negative implications of (female) risk aversion in entrepreneurship: (i) recognise the differences of each individual; (ii) consider the positive effects of diversity in risk aversion; (iii) take action, i.e. appoint people according to their specific characteristics. Secondly, another essay presents the example of collaborative entrepreneurship and risk taking in Indian communities. The author argues that “calculated and collaborative risk taking in developing countries can facilitate socioeconomic development.”

The author illustrates how community-based initiatives transformed unorganised workers in India from risk-averse to calculated risk takers.

**II.3 Cluster C: Emerging Risks**

Nearly every second essay of the top 50 contributions relates to Cluster C “Emerging Risks”. The Leaders of Tomorrow were asked to analyse specific risks and to “show the set of risks we are dealing with today, and for which risks a common understanding exists”. The essays can be categorised in the following five topic areas: environmental risk, social risk, political risk, economic risk and general considerations about emerging risks.

**Environmental risks**

Several Leaders of Tomorrow develop their perspectives on emerging environmental risks and potential consequences. All contributions highlight that policy makers need to address these risks more proactively to mitigate the far-reaching consequences. Furthermore, the Leaders of Tomorrow provide suggestions for policy makers and business practitioners on how to effectively address these emerging environmental risks.

By drawing a vivid picture of the agricultural sector in India, one Leader of Tomorrow illustrates the increasing risks agricultural workers are facing, particularly the vicious cycle of borrowing. Using income and consumption smoothing mechanisms, Indian policy makers may particularly promote micro-financing schemes and governmental projects such as a current project which “guarantees a minimum of 100 days of labor to every household in a year” to mitigate the rising risks faced by agricultural workers. Adding to this, another contribution emphasises the often forgotten risk of climate change for agriculture and its social and economic implications. As agricultural workers depend heavily on their work for nutrition and income, climate change leads to “even higher uncertainty and volatility”. To mitigate this emerging risk, “both policy change and technological progress” are necessary, since “they might offset the decrease in profitability and create a more enabling environment”.

Two other Leaders of Tomorrow address the topics of water shortage and water quality and the corresponding risks for society. In particular, one author argues that “the impact of water shortage leads to risks of violence, food shortages, diminished energy capacity and several others” and suggests taking the example of Singapore which overcame risks stemming from water shortage through innovation. Another Leader of Tomorrow complements this perspective, calling for governmental strategies that emphasise both human welfare and the conservation of this precious resource. Taking the devastating nuclear accident in Japan in 2011 as a “wake-up call”, one Leader of Tomorrow discusses the emerging, yet intertwined, risks of energy security and climate change. Providing examples where governments successfully introduced energy-conscious policies and new business opportunities, the Leader of Tomorrow argues in favor of steps to mitigate the risk of nuclear power. Another Leader of Tomorrow considers the risk of lead poisoning in Africa, a prevalent problem which has not yet captured public attention. For instance,
the author stresses that one should address the sources of lead poisoning and engage more actively with the private sectors.

**Social risks**

Considering emerging social risks, the Leaders of Tomorrow particularly direct our attention to increasing risks associated with indifference and inequality within society. In particular, one contribution argues that indifference among people is “hard to perceive and yet highly contagious” and tells two stories illustrating how social risks emerge from indifference. The Leader of Tomorrow offers a personal view on how indifference in societies can be combated. Besides indifference, inequality poses an increasing social risk by threatening democracy and the society’s social contract. One Leader of Tomorrow argues that increasing income inequality undermines democracy and calls for “investment in education and skill-building training to make the younger generation more competitive in the global market” to mitigate social risk. This call is reinforced by another Leader of Tomorrow who suggests investing in the youth to strengthen the social contract that defines the relationship between individuals and their government and to mitigate the contract’s decline. Using Japan as an example, the author highlights the business opportunities resulting from turning social risks into opportunities, e.g. through corporate social responsibility models.

Another Leader of Tomorrow also takes a business perspective to attenuate social risk, suggesting that people be considered as a stakeholder group. By adopting transparent processes and giving a voice to people, firms may help to mitigate social risk.

**Political risks**

Several essays focus on political risks, addressing these risks from different perspectives and viewpoints. For instance, two Leaders of Tomorrow recognise an emerging risk threatening the democratic system as an important, however, largely overseen risk. Democracy is threatened in particular by sharp inequalities within and across countries and by the “systematic disregard of states towards citizens’ civil liberties and human rights”. One author argues that “understanding and taking action to minimise these risks require tremendous collective cooperation at various levels of the political arena” and also across countries. Another Leader of Tomorrow complements this perspective by analysing the effects of the risk of diminishing democracy on individuals, economies and societies. Bearing these effects in mind, the author concludes by suggesting countermeasures to mitigate this risk such as investment in education and equality in the system or enhanced “communication between the political class and citizens”. Also relating to this topic, another Leader of Tomorrow discusses the geopolitical risks stemming from changes in the balance of economic, political and military power. By providing a roadmap, the author suggests mitigating geopolitical risk through higher levels of interconnectivity and trust between countries and a reform of the existing international security architecture. Taking a closer look at Europe, another essay reflects critically on the European Union’s dependence on Russian energy resources. The Leader of Tomorrow suggests that, by diversifying energy routes, the European Union may profit by stabilising its own energy supply and, at the same time, a higher “active involvement in the Eurasian regional conflicts would diminish geopolitical risks”.

**Economic risks**

Only a few contributions discuss emerging economic risks. Here, the Leaders of Tomorrow focus on specific types of economic risk and untangle the veiled sources of these risks. For instance, using the example of health care information in the internet, one Leader of Tomorrow argues that, in common with any other economic
sector, the healthcare sector is “prone to emerging problems with media technology”, since it is difficult to control inaccurate information distributed through the internet which leads to higher healthcare expenditure. Given the high impact of the healthcare system on the US gross domestic product, this constitutes a significant emerging risk. Furthermore, one contribution directs our attention to generally accepted social norms which, “without prudent consideration of its effectiveness or applicability to one’s idiosyncratic situation”, may be a source of hidden risk. Using the example of the credit crisis and the blind trust in the AAA credit rating, the author illustrates the emerging risk stemming from uncontroverted social norms. Another essay uses the Eurozone as an illustration of disguised economic risks that stem from a widespread misunderstanding of the meaning and impact of one-to-one parity between the Eurozone countries. Furthermore, one Leader of Tomorrow untangles the effects of foreign aid on economic growth, showing the emerging risks that stem from foreign aid if the country lacks good governance.

General considerations about emerging risks

Several Leaders of Tomorrow take a more holistic viewpoint, indicating the most pressing emerging risks and providing their perspectives on how these emerging risks can be mitigated. For instance, one Leader of Tomorrow provides a personal perspective on the three most pressing challenges, namely “the return to autarky, the re-emergence of autocracy and the failure to tackle the climate change crisis”. However, the Leader of Tomorrow perceives these challenges as opportunities for the generation of future leaders and contributes some thoughts on how these challenges may be addressed. Tracing the birth of the liberal economic order, another contribution summarises different types of emerging risks and argues that “these risks can be translated into opportunities for reform and change the current economic and political system at a very fundamental level”, such as through re-grouping of political will or political and strategic realignment. Taking a more critical viewpoint, one essay “asks the readers to consider themselves a part of a noble tradition of progress towards an ideal civilisation”. Critically, the Leader of Tomorrow indicates that “it cries out in agony and concern, noting that our culture of moral ambiguity and social nihilism has exacerbated our current socioeconomic woes, and laid the foundation for dangerous developments once our artificially inflated economies collapse”. Another noteworthy contribution introduces “trendpreneurs”, defined as “entrepreneurs who focus their entrepreneurial activity on averting the emerging risks of tomorrow’s world by understanding the trends of today’s”. The author describes a fictional organisation whose main mission is to help trendpreneurs avert the emerging risks of negative trends.

II.4 Managing Risk

One quarter of the top 50 essays focuses on Cluster D “Managing Risk”. In this subtopic, the Leaders of Tomorrow were asked to discuss how individuals, organisations and society can manage risk. Specific questions included “Who should bear the consequences of negligent risk taking and why?” and “How can healthy risk taking be fostered in wealthy societies?”. The essays provide comprehensive risk management frameworks, give specific recommendations and also focus on responsibility and ethics-related issues.

Comprehensive frameworks

The Leaders of Tomorrow propose different approaches for managing risk, ranging from more general frameworks to specific recommendations. Almost all contributions advocate the “professionalisation” of risk management. For example, one Leader of Tomorrow identifies five major risks which are considered to pose the largest threat to wealthy societies: change and conflicts in business decisions, debt crisis, investment risks, global risks and oil and energy shocks. The author proposes that decision makers in particular have to deal with the consequences and that probabilistic decision-making is needed.

Several contributions focus on specific measures for organisations dealing with risk. One Leader of Tomorrow suggests four measures that may enable us to manage the many risks associated with the new integrated economic order in today’s globalised world: (1) leadership (ensuring that leaders are qualified, responsible and make the right decisions); (2) cooperation (success in the world of business is defined as much by collaboration as it is by competition); (3) adaptation (a more dynamic environment requires necessary structural changes to keep up to speed); (4) regulation (implementation of reasonable rules that preserve the stability of the free market and the dignity of people and the environment). Another contribution draws upon principles of open innovation and proposes a stepwise process for managing organisational risks while innovating (cognitive risks, behavioral risks, institutional risks and uncertainty in project success). The process consists of the following five steps: (i) identifying the
appropriate knowledge strategy; (2) ensuring the right degree of openness; (3) ecosystem creation; (4) intellectual property management; and (5) project management maturity. In a similar vein, a Leader of Tomorrow shares personal experience as a former hedge fund manager and develops five lessons for successful risk management: “(1) protect the downside through a “minimax” approach; (2) an “interconnectivity tax” to make the system more stable”; (3) “consistent regulation” creates transparent rules that help facilitate commerce, giving more operating freedom; (4) new marketplaces create greater opportunities; (5) measure risk in multiple ways to reduce model risk!”. Finally, another essay explores how to manage risks in global governance from an international relations perspective. Specifically, the Leader of Tomorrow proposes three models to tackle global risks: (1) the construction of transnational regulatory advocacy networks; (2) the establishment of “global space”; and (3) a multi-stakeholder model.

Specific recommendations

In addition, several Leaders of Tomorrow provide specific focused recommendations for managing risk in their essays. Interestingly, they often use analogies to illustrate their arguments. Using the analogy of Capoeira, a Brazilian martial arts form, one Leader of Tomorrow derives two lessons from personal experiences to deal with failure and, consequently, how to deal with risk. Firstly, it needs to be acknowledged that “all humans are prone to failure”. Secondly, considering failure as a learning tool may foster a culture of healthy risk taking which is critical for dealing with contemporary challenges. Another Leader of Tomorrow discusses the risks of the precautionary principle that calls for regulatory action in situations of scientific uncertainty. The author proposes that the adoption of a “multifaceted and more open approach” is needed when using the precautionary principle, as this would also involve the risk that may arise from the application of this principle. Furthermore, the author advocates a greater inclusion of the public in order to improve the principle and build higher levels of trust. Additionally, illustrating the analogy of Kenyan runners as a successful model for healthy risk-taking, another Leader of Tomorrow advocates that the consequences of risk-taking should affect the decision maker personally. Consequently, the author argues that while “the employees in financial institutions are required to have some stake in risk, other consequences of risk-taking activities must be spread across banks, private investors and the state in order to protect and sustain our global economic system”. Pointing in a similar direction, one contribution deals with the role of the compensation of bankers as one aspect of risk management. The author discusses different compensation alternatives, stock-based compensation and claw-backs, and illustrates how the Swiss bank Credit Suisse provides an innovative example of compensation practices in banking.

Two other essays suggest ideas of how to encourage “healthy” risk-taking behavior. One Leader of Tomorrow proposes that corporate entrepreneurship may serve as an agent of change for healthy risk taking. Interestingly, in this contribution risk management is considered not only as risk mitigation but also as risk encouragement, which can be achieved by corporate entrepreneurship. Another Leader of Tomorrow illustrates the importance of risk taking by identifying risks to one’s personal as well as social growth. Furthermore, the author elaborates on three “cornerstones for the development of a risk-taking mentality”: (1) grant yourself the freedom to fail; (2) share your fears; and (3) take your time.

Responsibility and ethics

A final set of essays addresses responsibility and ethics-related aspects of managing risk. One Leader of Tomorrow discusses the reasons for the recent financial crisis and concludes that “because nobody wanted to be responsible, everybody became responsible”, resulting in a decrease in global societal wealth. Also referring particularly to the financial sector, another Leader of Tomorrow suggests that acting with the highest moral consciousness would “weather future known and unknown risks”. The essay concludes by advocating a “more human” approach. In a similar vein, another contribution discusses the problems associated with opportunities to exploit benefits arising from information asymmetries in the financial system. The Leader of Tomorrow asks who should be held responsible in a system with multiple agents. Furthermore, the author proposes how responsibility could be measured and, thus, how the responsible parties can be held accountable.

III. IMPLICATIONS AND CONCLUSIONS

As this review shows, there is a substantial variety in themes, ideas, case examples and methodological approaches to address the topic “Facing Risk” of the 42nd St. Gallen Symposium. Indeed, the contributions allow a very differentiated picture of this year’s topic. Among the general observations, it is notable that half of all the top 50 contributions focus on emerging risks. Though it is hardly possible to derive a comprehensive picture of the pressing
Because of the vast amount of highly interesting ideas of the Leaders of Tomorrow, many aspects had to be neglected and this summary may sometimes appear reductionist. Being aware of this limitation, however, it may stimulate discussions during the 42nd St. Gallen Symposium, both among the Leaders of Tomorrow and with the Leaders of Today. In addition, it may encourage participants to reflect on and critically discuss the Symposium’s topic “Facing Risk”.

Cluster A “Detecting Risks”: In light of increasing uncertainty, volatility and complexity in the global environment, the Leaders of Tomorrow suggest that the tools employed by business people and politicians to detect risk need to be reconsidered. In particular, the Leaders of Tomorrow suggest new tools and approaches to detect risks which are likely to be more efficient under these changed environmental conditions.

Cluster B “Risk Aversion”: The Leaders of Tomorrow discuss the long-term consequences of increasing risk aversion for the economy and society. Specifically, the essays focus on the concept and sources of (increased) risk aversion, portray general consequences of risk aversion and, to a lesser extent, provide recommendations on how to deal with it.

Cluster C “Emerging Risks”: Overall, the Leaders of Tomorrow address a broad range of emerging risks that have so far received little or no attention from business practitioners and policy makers. Specifically, the Leaders of Tomorrow uncover unperceived sources and provide tools which demonstrate how such emerging risks can be turned into opportunities.

Cluster D “Managing Risk”: The Leaders of Tomorrow discuss how individuals, organisations and society can manage risk. The essays provide comprehensive risk management frameworks, give specific recommendations and also focus on responsibility and ethics-related issues.

This essay review was written by Prof. Dr Markus Menz and Christine Scheef from the Institute of Management at the University of St. Gallen, based on the cooperation with Swiss Re.