



Project1 Number: 649378

Project Acronym: FIRES

Project title:

Financial and Institutional Reforms for Entrepreneurial Society

Periodic Technical Report

Part B

Period covered by the report: from 01/06/2016 to 31/05/2018

Periodic report: [2nd]

¹ The term 'project' used in this template equates to an 'action' in certain other Horizon 2020 documentation

1. Explanation of the work carried out by the beneficiaries and overview of the progress

The FIRES-project ended May 31st of 2018 having achieved all its objectives and delivered all its foreseen deliverables and more. As to the main question in the Call the project set out to answer: How to restore inclusive, innovative and sustainable growth to Europe? The short answer is: By strengthening entrepreneurial ecosystems throughout the Union. Of course the more important question then is: how. It was established firmly in the project, however, that that question does not have a single and uniform answer. Europe has a rich and diverse historically evolved institutional landscape and interventions will need to be fitted to local conditions to be effective. Moreover, this diversity also implies the strengths, weaknesses and bottlenecks in the ecosystem differ from place to place and time to time. To answer the question, we therefore developed a toolbox and process to diagnose the situation and select suitable interventions from a longlist of possible interventions that was developed in dialogue with stakeholders, policy makers and is firmly based in the scientific literature. This process was implemented for three member states (Italy, Germany and the UK in [part II of deliverable D5.12](#)) to illustrate the practical relevance of our proposed approach and the results were reported in policy briefs and discussed at policy roundtables in the respective countries. The proposed process and underlying catalogue of possible reforms is described in more general terms in [D6.4](#) and [part I of D5.12](#). In addition to the reports submitted in the project, these project results will also be published (open access) with Springer in two handbooks that will together provide policy makers at all levels in the European Union with a roadmap towards a more entrepreneurial society in Europe.

Over the reporting period (1st June 2016 - 31st May 2018) the work on FIRES project has been concluded in all work packages and the consortium has completed all tasks. In the first reporting period, we have submitted 15 deliverables (including 2 additional deliverables on ethics) to the EC, reached the 2 milestones provisioned, organized the Kick-off conference and participated at several dissemination events. In the second reporting period the remaining 40 deliverables were added, all 9 milestones have been reached and three more conferences involving stakeholders in Utrecht (October 2016), scientific colleagues in Athens (October 2017) and policy makers in Brussels (May 2018) as well as 9 policy round tables (Athens, Utrecht, Rome, Lisbon, Arnhem, Berlin, London and the remaining three in Brussels) were organised in which the developed reform agenda was presented in part and discussed in detail.

In the months following the first review in Brussels we went full steam ahead on the academic work and started building our reform agenda for a more entrepreneurial society in Europe. Key milestones in that process were the conference in Utrecht in October 2016, where we brainstormed with key stakeholders about reforms, green and mature across the diverse fields of finance, knowledge and labour. Meanwhile, especially in [work package 2, D2.1](#), the colleagues at IFN prepared a much more rigorous discussion of the relevant institutions and academic evidence in support of the many feasible interventions to promote entrepreneurship in basic property rights, in taxes, the allocation of savings, the organisation of labour and social security, regulation of goods and services markets, bankruptcy, R&D, education and informal institutions. This important work was published as an open access book with Springer publishers in 2017 and presented on various occasions, including at the Swedish representation in Brussels in November 2017. On the basis of these two projects, a full blown list of 64

reform proposals was developed and discussed at the 2017 Athens conference, resulting in a report submitted as Part I of deliverable [D5.12](#). A lot of extra effort went into this deliverable and Task 5.5 it aimed to achieve. Meanwhile, in [work package 6](#) the colleagues of KULeuven built on the structure outlined in [D2.1](#) with a detailed analysis of policy competences in the EU ([D6.2](#)). The process was concluded with three in depth country reports on Italy, Germany and the UK (Part II of [D5.12](#)) of which the respective policy briefs were presented to a panel of policy makers in these respective member state capitals in the spring of 2018 and the researchers in WP6 used desk research, telephone interviews and these policy round tables as input to assess the legal and political feasibility ([D6.3](#) and [D6.4](#)) of the FIRES-reform proposals.

The academic work in work packages [2](#), [4](#) and [5](#) was fruitfully brought to bear on these country reports as these reports triangulated historical analysis from [work package 2](#), numerical data analysis using the index method developed in [work package 4](#) and qualitative data analysis from elaborate surveys among founders in these respective countries in [work package 5](#). Obviously it was not possible to make every individual deliverable and report relevant in the context of these country reports, but the large bulk of the work done, was made relevant in the capstone deliverables.

The work in [work package 3](#) aimed to empirically and scientifically strengthen the case for a transition to an entrepreneurial society, zoomed in on its likely impacts on innovativeness, inclusiveness, sustainability and overall well-being in the face of important future megatrends. The research done in [work package 3](#) resulted in high impact academic publications.

The work in FIRES was done by teams of researchers in the nine [partner institutions](#) and involved 46 [researchers](#), of which 20 (43%) can be classified as “early career” researchers and 11 (23%) are female.

Table 1: FIRES Researchers (* marks left the project)

Partner number	Country	Acronym	Full Name	Participant Name
1	Netherlands	UU	Utrecht University (Universiteit Utrecht)	Mark Sanders
				Hans Schenk
				Erik Stam
				Jacob Jordaan
				Werner Liebregts*
				Niels Bosma
				Rens van Tilburg*
				Jeroen Content
				Gerarda Westerhuis
				Selin Dilli
				Koen Frenken
				Andrea Herrmann
2	Belgium	KUL	Katholieke Universiteit Leuven	Lukas Held
				Johannes van Biesebroeck
				Axel Marx
				Jan Wouters
				Philip de Man*

				Kathleen (Karen) Geurts*
				Andrei-Gavril Suse
				Ward Munters*
3	Germany	FSU JENA	Friedrich Schiller Universitat Jena	Michael Fritsch
				Alina Sorgner
				Michael Wyrwich
				Moritz Zoellner*
4	Greece	UPRC	University of Piraeus Research Center	Claire Economidou
				Sofia Xesfingi*
				Dimitris Karamanis*
5	Hungary	PTE	University of Pecs (Pecsi Tudományegyetem)	László Szerb
				Gábor Rappai
				Tamás Sebestyén
				Márkus Gábor
				Éva Somogyiné Komlósi
				Páger Balázs
				Atilla Varga
				Szófia Vörös
6	Italy	POLIMI	Politecnico di Milano	Luca Grilli
				Boris Mrkajic
				Gresa Latifi
				Emanuele Giraudo
7	Portugal	IST	Instituto Superior Tecnico	Miguel Amaral
				Miguel Torres Preto*
				Catarina Seco Matos*
8	Sweden	IFN	The Research Institute of Industrial Economics	Magnus Henrekson
				Mikael Stenkula
				Niklas Elert
				Fredrik Andersson
9	United Kingdom	LSE	London School of Economics and Political Science	Zoltan Acs*
				Saul Estrin

Work on the many deliverables in the project since M12 is described in more detail per work package below. In general there have been some delays and some minor adjustments and changes to the nature of the deliverables relative to the original Dow. These, however, all fall well into the range of normal adjustments and deviations one makes when doing scientific research. Some proposed deliverables, however, deviate a bit more. For one case study [D5.10](#) a complete change of theme was requested and approved as no expertise on the originally formulated topic could be recruited. In [D2.4](#) Historical Evolution of Knowledge Institutions, the authors followed up on promising research opportunities and zoomed in on the institutional embeddedness of STEM-education for especially females and its impact on innovative entrepreneurship. In [D3.7](#) the inability to hire a suitable post-doc researcher for the originally intended report implied a different research method was implemented (behavioural lab experiment) to address the original question in a creative way. Apart from these minor

“pivots” the work on all deliverables has proceeded according to plan. For many (26) of the deliverables from the project, this has also resulted in submitted manuscripts to peer reviewed journals. Several have already been published or are under review and it is expected that all will be published within the next two years. The data collected and networks established are also expected to generate further academic output in years to come. In 2017 the FIRES-consortium proposed a special issue dedicated to the theme of the project in Small Business Economics Journal and FIRES researchers Claire Economidou, Magnus Henrekson, Luca Grilli and Mark Sanders volunteered to serve as guest editors for this open access issue of the journal. The Call for Papers was opened in spring of 2017 and the special issue was published (online first) in March 2018. As was mentioned earlier, the report submitted as [D2.1](#) was published open access as a book with Springer Publishers and two more have been contracted to be published out of the project in 2019.

In addition to the reports and manuscripts, the FIRES-project put a strong emphasis on stakeholder engagement. This innovative way of doing scientific research, was not always easy, but proved highly rewarding. Many stakeholder consultation workshops have been organized (planned as part of [D2.1](#), [D2.2](#), [D2.3](#), [D2.7](#), [D3.3](#), [D3.6](#), [D3.7](#), [D4.1](#), [D4.3](#), [D4.6](#) and [D6.1](#)), to help sharpen our research questions and create support for the work in the project. Although it proved not always easy to attract all relevant stakeholder groups (active entrepreneurs, investors, bankers, union representatives, knowledge institutions and policy makers) for these events, we did succeed in discussing most of our research with many of these stakeholders early on in the project. Then the work on our many scientific deliverables was begun and is described per work package in more detail below. Towards the end of the project, some 10 policy round tables, typically covering more than one deliverable or task, were planned and 9 have been organized in the spring of 2018. One ([D2.2](#)) was replaced by a series of interviews with policy makers as it proved impossible to convene a table before the end of the project. A full report on all round tables organised was published on the [website](#) (and attached to the reports of deliverables D2.2, D3.3, D3.6, D3.9, D3.10, D4.2, D5.12 (3x) and D6.4 in ECAS), where the reports for D2.2, D4.2, D6.4 have been added between the Brussels review meeting of May 24th and the formal end of the project on May 31st.

The stakeholder engagement strategy of the FIRES consortium was centred mainly around the annual meetings. In the second reporting period we first organised a [conference in Utrecht](#) where vested interest representatives, such as banks, venture capitalists, union representatives, university and research institutes etc. were invited to join the FIRES-researchers for a discussion of reform proposals that were formulated in a brainstorm based on FIRES-research and the literature. This brainstorm resulted in a longlist of ideas that was organised in reforms to promote the flow of labour, knowledge and finance to entrepreneurial venturing respectively, as well as categorised into no-regrets, debatable ideas and radical reforms. The stakeholders indicated they appreciated the out-of-the-box thinking and creative ideas that were suggested and even if they disagreed with specific proposals, still generally felt the discussion was fruitful and led to new insights and ideas. The harvest of this conference was then taken to the literature and the ideas were refined and further researched. A survey among the FIRES-researchers in September 2017 then revealed the most contested ideas from a long list of some 80 proposals.

These were discussed in some detail in the [Athens conference](#) of October 2017. Originally, the conference in Athens was intended to also engage with the academic community outside the FIRES-consortium, but after consultation with the project officer it was agreed that the FIRES-meeting in

Athens would have a different character. A large part of the program was dedicated to presenting and discussing the academic output of the project, where the senior researchers in the FIRES-project would give extensive comments and suggestions especially to help the early career researchers get their work published in better journals. The second part of the meeting was dedicated to the discussion of the menu of policy interventions that was being developed as Part I of [D5.12](#). The engagement with the academic community, however, was not neglected. Instead of organising a FIRES-event for that purpose, the consortium members attended many conferences, seminars and workshops, presenting the FIRES-work and project to the outside world (Annex 2 below). Moreover, the FIRES-consortium secured separate tracks and sessions in the [IECER 2016](#) and [2017](#) and [WINIR 2017](#) conferences, as well as organised a presence at the [Future Internet Meeting in Hamburg 2015](#), the [TechOpenAir in Berlin 2016](#) and at the [Startup Delta Summit in Arnhem 2018](#). Our experiences with stakeholder engagement and their implications for our future engagement strategy are reported and motivated more elaborately below.

Overall the project has been completed according to plan, although some minor amendments have been necessary. A more detailed report per objective, task and work package is provided below. But with the conclusion of the project, the real work now only begins. The FIRES-project has resulted in a practical and science based seven-step approach to formulating a tailor made reform strategy for local, regional and national entrepreneurial ecosystems in Europe. But it is impossible to answer the question what Europe should do to restore inclusive, innovative and sustainable growth across the board. Instead, the Commission should offer the FIRES-methodology for diagnosing the problems and engaging in a dialogue to verify and solve them, to the various policy levels engaged in trying to promote entrepreneurial venturing in Europe. Only with a coherent and scientifically informed reform strategy can Europe hope to gradually overcome the many barriers to innovative, inclusive and sustainable entrepreneurial venturing and Europe will firmly (re)assert its position at the global technology frontier. The general direction of our proposals is to liberalise and break open the relevant closed systems for allocating labour, knowledge and financial resources. But how that is to be done will have to differ from place to place and sector to sector. The multi layered complexity of the issue forces us to be ambitious and patient in our policy goals and humble and modest in our short term expectations. An effective reform strategy to promote entrepreneurial venturing in Europe will furthermore require experimental policy making. The reforms we propose are not evidence based in the sense that we have the evidence prove that these interventions will work in the predicted way in all given contexts. We do not propose policy makers blindly implement the many proposals we have discussed in our project but rather implement them with careful structures in place to evaluate and update the evidence base as interventions are being tested. European entrepreneurs should have more knowledge, labour and financial resources available to experiment and learn, but so should European policy makers.

1.1 Objectives

The objectives of the project were listed in Table 1 of the DoA and reproduced below. In this section, we report on progress towards achieving these objectives.

Objective	Approach	Actions
Characterise Europe's trajectories of national development in institutional arrangements	History and Institutional Economics	<p>Focus on institutions governing the creation and allocation of financial, human and knowledge capital</p> <p>Identify and distinguish those that are deeply embedded from more superficial (and easily changeable) institutions</p> <p>Identify and distinguish common roots and national/regional divergence in institutional development</p>
Urgency and desirability of the transition towards a more entrepreneurial economy	International Economics, Economics of Innovation and Labour Economics	<p>Collect data and analyse trends in specialisation patterns over global value chains</p> <p>Analyse strategies for smart specialisation at the task-level for European nations and regions</p> <p>Analyse job growth and opportunities through entrepreneurial activity</p>
Tools to assess the current state of the entrepreneurial economy in Europe	Entrepreneurship Studies	<p>Collect and analyse data on institutional quality and entrepreneurial activity at a national and regional level</p> <p>Focus on institutions governing the supply and allocation of financial, human and knowledge capital</p> <p>Develop entrepreneurship scoreboard to identify opportunities, bottlenecks and urgent reform strategies.</p>
Tailoring reform strategies to European member states and regions	Institutional Economics, Policy Design and Evaluation	<p>Focus on institutions governing the supply and allocation of financial, human and knowledge capital</p> <p>Distinguish strategies as short, medium and long run driven by institutional embeddedness</p> <p>Distinguish strategies by their most appropriate level as regional, national and European</p>
Legal action and reforms required to implement the strategy effectively	Administrative Law and International Law	<p>Translate proposals into specific policy actions for specific actors given current EU legal frameworks (treaties, national competencies and regional autonomy)</p> <p>Identify opportunities, problems and obstacles to implementing the proposed reforms in the current legal framework</p> <p>Propose required changes to European, national and regional legal frameworks where needed</p>

Work on all objectives has necessarily proceeded in parallel, perhaps with the possible exception of objective 5 that is central in [work package 6](#). Early on in the project the researchers in [work package 2](#) concluded the heterogeneity of local histories and institutional starting positions was so diverse across

the European Union, that a one-size-fit-all approach to building a reform strategy would be useless. And at the same time, that formulating a reform strategy in detail for all European regions would be well beyond the scope and resources of our project. We therefore focused our efforts on developing a general approach to formulating a reform strategy without falling into the trap of getting stuck at a very high level of abstraction and generality. To build a tailored reform strategy for any country or region in the Union, however, we propose seven steps have to be taken. These seven steps link up very closely with the five objectives described in table 1 above. The seven steps are detailed in Part II of [D5.12](#) and the corresponding policy briefs.

On the first objective of characterising the trajectories and institutional arrangements has been achieved primarily by the researchers involved in [work package 2](#). In the first reporting period the above conclusion on the vast diversity of institutional preconditions was already apparent. In [D2.1](#), however, researchers Henrekson, Elert and Stenkula (2017) made a gargantuan effort to identify the broad range of relevant institutions and collected the evidence on reforms and policy interventions to promote entrepreneurial venturing in the nine institutional area's they identified to be most relevant. Work on institutions for knowledge ([D2.4](#)), labour ([D2.5](#)) and finance ([D2.2](#)) all necessarily had to limit their scope to result in academically publishable outputs, but all three reports contributed to a deeper understanding of the interplay between institutions and entrepreneurial activity in the European context. The more thematic deep drill on venture capital in Europe ([D2.3](#)) could proceed and was delivered according to plan, contributing further evidence and insights in that important part of the financial infrastructure supporting new venturing in Europe. Zooming in on institutions, however, requires zooming in on countries and regions and this makes it difficult to draw general conclusions on the embeddedness and reformability of institutions across Europe. Based on these insights it was decided that the assessment of the historical foundations would have to be part of the process to tailor a reform strategy to local conditions and the historical analysis of labour, finance and knowledge institutions has thus been included into the country reports on Italy, Germany and the UK in Part II of [D5.12](#).

The second objective was achieved mostly through the work in [work package 3](#). The first tasks in that work package involved the collection and analysis of a dataset on regional specialization and entrepreneurship. The work in these tasks was executed by PhD-student Jeroen Content at UU and the results of this work have been published or submitted for publication in three peer reviewed articles and his PhD-thesis that is to be defended towards the end of 2018. Work at KUL and FSUJ has shown the importance of entrepreneurship for job creation and growth and shown that entrepreneurial venturing increases job satisfaction across the board. Work at PTE and UPRC analysed the inclusiveness of elderly entrepreneurship and linked knowledge mobility and innovation to entrepreneurial activity at the regional level. Finally, work at UU established a link between entrepreneurship and pro-social behaviour, linking entrepreneurship to social corporate responsibility. Together with [D2.7](#), in which research at KUL identified and established relevant megatrends and challenges for the future, the FIRES-project firmly established that a transition to a more entrepreneurial Europe is urgent, desirable and essential to enjoy inclusive, innovative and sustainable growth in the future.

The third objective in the Table above was firmly embedded in the work of [work package 4](#). Work towards achieving these objectives was somewhat delayed and complicated by Professor Zoltan Acs leaving FIRES partner LSE. By adding Professor Acs to the Advisory Board of the project and reallocating the resources among UPT and UU, the work could progress as planned, albeit with some delays in

delivering some of the milestones and deliverables. It also proved a bit harder to coordinate the work between the partners remaining in the work package. Towards the end, however, the efforts all came together and all deliverables have by now been submitted, achieving the overall objective of extending and improving the GEI-REDI dataset and illustrating how it may be used as a tool to assess the state of the entrepreneurial ecosystem in European regions and member states. In the final deliverable of [work package 4](#) this tool was furthermore linked to the GMR-Europe model that allows policy makers to simulate policy interventions to strengthen the entrepreneurial ecosystem in an extensive, regionalised stochastic dynamic general equilibrium model. Together the developed tools allow policy makers to assess the quality, identify the bottlenecks and simulate the impact of addressing them.

The fourth objective is greatly aided by the work as described under objective one in [work package 2](#) and the case studies that have now all been delivered in [work package 5](#). The latter do not necessarily show how specifically a reform strategy should be tailored to a specific national context. Nevertheless, they do show us that national institutional contexts matter a great deal in shaping (or preventing) entrepreneurial ecosystems to develop. That lesson was confirmed in the sequence analyses of start-up processes in Italy, Germany and the UK. The data collection effort in [work package 5](#) did suffer some unforeseen delays, especially for Italy. This required changes to still achieve the objective. As was agreed with the project officer, budget and resource reallocations were made to accommodate these issues. In the end, a comparable and representative dataset was compiled for Germany, Italy and the UK, although the number of records has been less than originally anticipated. The dataset and full documentation will be held on repository and made public for research purposes once the FIRES-commissioned manuscripts have been published. These analyses will also be available in the form of a PhD-thesis by Lukas Held, to be defended in 2018. The final objective of tailoring a reform strategy to EU member states was most tangibly achieved in the form of three country studies and policy briefs in part II of [D5.12](#). Work on this deliverable was undertaken and coordinated by the project coordinator. The originally foreseen classification in short, medium and long term strategies to promote labour, finance and knowledge at the regional, national and EU levels, respectively, proved less useful as the project proceeded. [D2.1](#) identified 9 areas in which interventions would be useful and the complex institutional interactions more or less imply that any strategy is long term and requires coordinated and coherent policy action at all levels. Instead, [D5.12](#) therefore describes a 7-step procedure for tailoring reform strategies to local preconditions, so the objective is achieved in a slightly different way than was originally foreseen.

Working towards objective five has resulted in a careful mapping of how entrepreneurship policy is being implemented in Europe today. In the end our proposals lie well beyond the scope and competence of the more traditional entrepreneurship policy makers, but of course, we started there. As the specific targeting of our policy proposals and institutional reform strategy can only be done when one has reached consensus on what to propose, the policy briefs on Italy, Germany and the UK that were delivered towards the end of the project, were an important input for the work on [D6.3](#) and [D6.4](#), that are specifically targeting this objective. As indicated above we have started the policy and reform strategy discussion in the consortium very early on in the project but could effectively conclude it only in month 33. By keeping those involved in [work package 6](#) well-informed and iterating frequently between legal feasibility and economic desirability, the deliverables achieving this objective have also been submitted on time.

Overall it can be concluded that the FIRES-project has made significant progress on all stated objectives. We have intensified our efforts on the objective to accurately map the quality of entrepreneurial ecosystems in Europe. Finally, establishing the need and desirability of a more entrepreneurial Europe receives much external support as policy makers in Europe all embrace the Entrepreneurial Society.

1.2 Explanation of the work carried out per WP

The deliverables in the FIRES-project were described in the DoW and GA. After discussion with the Commission it was decided that many of the deliverables that were originally proposed, could usefully be clustered into less, but bigger deliverables. The deadlines for these new, compound deliverables were then shifted to the deadline of the last component. This gave the beneficiaries of the project more flexibility, but also made the deliverables more complex. In general a typical deliverable would now consist of a report on research done and on many it was required that proof was given that a manuscript based on that research/report had been submitted. Often authors then skipped the report stage and submitted a manuscript only. Also many deliverables contained stakeholder consultation workshops, policy briefs and/or policy round tables that often were linked to the deliverable they were attached to, but sometimes also were originally intended to cover all reports in a task or even more tasks. This was not always clear and towards the end of the project, where the most complex and compounded deliverables were due, implied some minor adjustments were made. The flexibility and extra efforts of many of the project participants implied that in the end almost all deliverables could be delivered as intended and on time. This is also foreseen for the three that need a report on the workshops planned for May 25th in Brussels and the one still completing a series of interviews in the final weeks of the project. The deliverables were uploaded in the European Commission's system as single .pdf documents consisting of multiple parts, but made available on the FIRES website in a more accessible way. In the reporting on the work packages, tasks and deliverables therein below, the focus is on the tasks. The table in Annex 1 gives a full overview of the deliverables and their components.

1.2.1 Work Package 1

Summary of progress towards objectives specified in Annex 1

The main objective of [work package 1](#) was to manage the entire project and coordinate the work between all the partners, and with the European Commission. Overall, the project management of FIRES has been implemented to the satisfaction of all parties.

By the end of the project, all foreseen deliverables, even the complex composite ones, have been delivered. Some of the deliverables were slightly delayed compared to the original plan, however, these delays had no effect on the overall progress of the project. To ensure the high quality of all these deliverables, the quality assurance procedures have been put into practice and proved to work effectively. Internal reviews and comments frequently led to smaller and bigger improvements and helped push the level of quality further up.

The coordinator has been in close contact with all the partners since the start of the project. The research content issues were communicated mainly through the WP coordinators within the respective work package, whereas the overall issues having an impact on the project as a whole were communicated through the coordinator directly to the entire consortium. The scientific coordinator

has visited all partner institutions on several occasions and several FIRES researchers have spent some time at Utrecht University. These visits were also financed outside the FIRES budget, but were of a great benefit to the project. Next to the research channels a parallel mailing list and communication channels were established with the administrative and financial support offices of all beneficiaries, in order to communicate and discuss administration-related issues. This structure has proved to be an efficient and effective communication tool during the project and will prove its value also in the months to come in which the financial reporting will be done.

In addition to the formal reporting to the EC, an interim internal reporting procedure has been set up to ensure that all partners are fully on track and communicate any possible changes to the coordinator. This interim reporting was organized through two channels – through the financial and administrative support on financial issues, and through the work package coordinators on the research related progress. The interim reporting proved very useful when the deadline for this formal reporting approached.

In close collaboration and communication with the researchers involved, there were some budget reallocations in WP5 that were cleared with the project officer. Also, in WP5 a case study had to be adjusted after it became clear that the required expertise for the originally planned case study was not available. All these administrative issues were handled effectively and smoothly. During the project several minor issues with deadlines, internal reviews and other problems arose and were tackled by the consortium management. Overall, the researchers could work in relative peace and quiet towards their objectives and communication and administration have been kept to the bare minimum.

Details for each task executed

Task 1.1 Project management, financial management, and reporting

After about 18 months, the project manager, Ms. Martina Chylkova, was replaced by Mr. Mike Robinson to assist the scientific coordinator with the overall implementation of the project and to ensure a smooth project management. Mike quickly and seamlessly took over the many responsibilities of Ms. Chylkova and established regular contact with all the consortium partners, the [advisory board](#) and with the dedicated project officer at the European Commission.

The management structure of the project has been set up and formalized through the Consortium Agreement. As the main decision body, the Executive Board (EB) has met at least twice per year and each work package was represented there through its coordinator. Important management issues about the research progress or matters that might influence the research were discussed in these regular EB meetings as well as in bilateral contacts where appropriate. Overall communication in the project was smooth and effective.

The financing received by the coordinator during the project were distributed promptly to all project beneficiaries. Contact was established with the financial and administrative support offices at all partner institutions. In addition to the official reporting to the EC, a six-monthly interim financial reporting has been put in practice, as well as an intermediate scientific reporting to monitor the progress made in the work packages. The coordinator provided continuous support to all partners with regards to the reporting and any other issues that occurred.

Task 1.2 Quality Assurance

Assurance of the scientific quality of all FIRES results is of the utmost importance for the project. At the beginning of the project, the Quality Assurance plan was submitted as D1.1 and put into practice. The following quality assurance measures were implemented within the FIRES project:

Peer review for each deliverable executed by two researchers from the consortium. Where possible we aim for at least one of the peer reviewer to be from outside the Work package from the peer-reviewed deliverable. Nevertheless, in a quite small consortium where the WPs are inter-connected and many researchers participate across WPs, this has proved to be quite challenging and slowing down the process. Therefore, the deliverable reviewers were chosen outside of the team working on the deliverable, but not necessarily outside of the WP. Each deliverable is also always reviewed by the project coordinator as the final approving instance. The peer review process proved to be an efficient tool in the quality assurance process.

[Advisory Board](#) members are invited to annual consortium meetings. There was a strong involvement of one advisory member, in particular, Professor David Audretsch, who participated in the Kick-off conference, the Utrecht conference and the Brussels final conference, and offered his assistance and inspiration in many other ways. Professors Hermann Wijffels and Jan Luiten van Zanden attended and contributed greatly to the Utrecht consortium meeting, whereas Professors Roy Thurik and Zoltan Acs played an important role in the Athens conference, both as advisor and reviewer. The coordinator has been in frequent contact with all AB members for their feedback and discussions.

Task 1.3 Project meetings

All the meetings that were planned and foreseen in Annex I have been successfully organized. Some were shifted a month or two and in Greece we decided to not have the event on Hydra but rather in Athens, for convenience. In addition to the four full consortium meetings (Berlin, September 2015, Utrecht, October 2016, Athens, October 2017 and Brussels, May 2018), four Executive Board (EB) meetings have been organized in Utrecht since the start of the project (June 2015, April 2016, April 2017 and January 2018). The EB is composed of the coordinators of each work package and is complemented by the UU shadow board. That is, although formally the (more senior) work package leaders are in charge and responsible, they are all in close contact with and supported by a senior researcher at Utrecht University. This shadow board could then meet more frequently and handle minor organisational and administrative things directly. That, however, did not prove necessary in the end. All issues were either handled in the formal EB meetings or could be tackled in bilateral communication. Still, the shadow board did form a convenient sounding board and first point of communication for the project manager and scientific coordinator. At its formal meetings, the EB discussed the overall progress and planning of the research, project deliverables, plans, and format of the consortium meetings and conferences, stakeholder engagement strategy, and challenges and difficulties that have arisen in the work packages. The minutes of all EB meetings were always distributed to EB members after the meeting and are available to the EC upon request.

Table 2: Project meetings organized

Meeting	Host	Location	Date
Executive Board meeting #1	UU	Utrecht	18 June 2015

Kick off meeting and conference	UU	Berlin	2-4 September 2015
Executive Board meeting #2	UU	Berlin	4 September 2015
Executive Board meeting #3	UU	Utrecht	8 April 2016
Stakeholder Conference	UU	Utrecht	12-14 October 2016
Executive Board meeting #4	UU	Utrecht	6 April 2017
Academic Conference	UPRC	Athens	7-9 October 2017
Executive Board meeting #5		Athens	8 October 2017
Executive Board meeting #6	UU	Utrecht	24 January 2018
Executive Board meeting #7	KUL	Brussels	23 May 2018
Policy Makers Conference	KUL	Brussels	25 May 2018

Use of resources (will be added after full financial reporting is completed):

WP1				
Partner Number	Partner Name	PMs planned	PMs spent	PMs remaining
1	UU			

*Detailed explanation on the PMs spent in WP1 is provided in Section 5.2 Use of resources

1.2.2 Work package 2

Summary of progress towards objectives specified in Annex 1

The core objective of this WP is to analyze the historical roots and evolution of the institutional arrangements that are most relevant to European entrepreneurial ecosystems and to identify the most important future challenges and opportunities in this respect. Below we will describe what has been achieved under the respective tasks. All results have also been summarized in Policy Briefs, one for each of the five tasks, which are available [here](#).

Details for each task executed

Task 2.1: The institutional framework for innovation and entrepreneurship

The purpose of this task is to identify the most important policy areas and measures likely to create a favorable environment for entrepreneurship.

Magnus Henrekson held two consultation workshops (June 2015 and February 2016) with leading industrialists who have given their views on what institutions they consider crucial for the creation of a favorable ecology for entrepreneurship. The FIRES project has also been described in then IFN Newsletter that reaches more than 4000 subscribers (June 2015).

In order to lay the ground for this task Selin Dilli (UU), Niklas Elert (IFN) and Andrea Herrmann finalized a first extensive study “Varieties of entrepreneurship: exploring the institutional foundations of different entrepreneurship types through ‘Varieties-of-Capitalism’ arguments”. The paper has been accepted and is forthcoming in *Small Business Economics* (available [here](#)).

Dilli et al- find that one-size-fits-all reform strategies are unlikely to be successful. Reform strategies must be informed by a better knowledge of the varieties of European capitalism and the institutional complementarities that drive these differences. By employing principal component analysis, factor analysis and cluster analysis to examine how 20 European countries and the United States cluster in the entrepreneurial and institutional dimensions, the authors identify four country clusters, or entrepreneurial regimes, with a distinct bundle of entrepreneurial characteristics and institutional attributes.

The study provides the foundation for the study that completes task 2.1 *Institutional Reform for Innovation and Entrepreneurship: An Agenda for Europe* by Niklas Elert, Magnus Henrekson and Mikael Stenkula (all at IFN), and published as an Open Access book by Springer in 2017 available [here](#).

The authors argue that institutional changes in a liberalizing direction are a *sine qua non* for economies of the European Union to become more entrepreneurial in order to promote innovation and economic growth. However, this does not mean that one-size-fits-all policy reforms towards freer markets are likely to be successful. An important reason is that the 28 union member states have very different histories, and distinct institutional structures, affecting their efficiency and the viability of reforming them. These differences imply that the same policy reform may yield very different results in different countries, ranging from the good to the bad to the ugly. They therefore formulate a reform strategy that takes country differences into account without abandoning the long-term goal of institutional liberalization in order to promote entrepreneurship, innovation and growth. The proposed strategy concerns reforms with respect to (i) the rule of law and the protection of property rights, (ii) the tax system, (iii) regulations governing savings, capital and finance, (iv) the organization of labor markets and social insurance systems, (v) regulation of goods and service markets, (vi) bankruptcy and insolvency regulation, (vii) R&D, commercialization and knowledge spillovers, (viii) human capital investments, and (ix) informal institutions.

Task 2.2: Institutional evolution of finance in Europe and entrepreneurship

The purpose of this task is to identify the most important financial institutions in Europe that facilitate or hamper entrepreneurship and review their historical evolution.

In [D2.2](#), entitled “A historical perspective on the varieties of institutions, finance and entrepreneurship”, Selin Dilli and Gerarda Westerhuis rely on Dilli et al. (2018) (as described above in task 2.1) to identify the different types of constellations in the financial institutions of Europe and their challenges for entrepreneurial activity. Based on this classification, the authors focus on the historical evolution of banks and family lending as two alternative financing options in Europe that can help to overcome the lack of financing for entrepreneurs. In particular, they argue that policies targeted to stimulating family lending can be a useful strategy, particularly in the Mediterranean and the Eastern European countries given that family ties are historically strong and formal financial institutions remain limited to stimulate entrepreneurial activity in these two regions. The authors argue that the weak family ties of the North Western Europe, which has roots going back to the late Middle Ages, led to

the development of formal financial institutions favorable for formal lending options for entrepreneurs already in the early modern period. This deliverable has been submitted for publication to the *Financial History Review*. A working paper version is available [here](#).

In [D2.3](#), entitled “Venture Capital in Europe”, Luca Grilli, Boris Mrkajic and Gresa Latifi search for the institutional drivers behind the development of a flourishing venture capital (VC) sector in Europe. With the aim of gaining an on-the-field perspective on the theme, a consultation workshop for stakeholders was held in the Fall 2016 with personnel and analysts from the Italian Ministry of Economic Development, the Italian Union of Chamber of Commerce, the Italian National Institute of Statistics, CONSOB, (i.e., the government agency responsible for regulating the Italian financial markets) and Cassa Depositi e Prestiti (one of the most important limited partners in VC funding in Italy). Then, they conducted an extensive literature review based on scientific studies in the economics and management literature aiming at identifying those institutions which were found to be conducive to the birth and growth of a VC sector. Based on the seminal work of North (1990), they consider formal (laws and formal rules) and informal (e.g., cultural norms and tacit codes of behavior) institutions.

Based on that review, they conclude that there are few EU studies of VC activity and those studies deal almost exclusively with formal features of institutional environments, leaving the informal dimensions largely unexplored. Thus, they perform an empirical analysis, based on longitudinal country-level data for 18 European countries during the 1997–2015 period, to explore whether the “usual suspects” mostly embodied in *reformable formal institutions* (i.e., investors protection laws, tax codes, and labor market regulations) really play a role in the European context. They also investigate whether social capital, a prominent and deeply rooted informal institutional feature, may exert a significant effect. Finally, they test how *structural formal institutions* (e.g., rule of law and government effectiveness) influence the development of a VC industry. Interesting findings emerge, yielding useful implications for regulators.

The results indicate that the social capital does indeed play a role in VC activity. Moreover, they find evidence that the impact of social capital structures on VC is mainly channeled through their role in establishing those *structural formal institutions* which are keen on the development of VC. If structural formal institutions might be relatively easier to change than social capital, at least in the mid-term, nonetheless the picture that emerges from the analysis is that VC is mostly influenced by deeply rooted (formal and informal) institutional features which are largely impervious to change. In this respect, the only *reformable formal institution* that is found to exert a non-negligible effect is taxation. While, reforms aiming at increasing flexibility in labor markets or investor protection do not appear to provide an effective stimulus for VC industry in Europe. Overall, Grilli et al. provide scientific insights on the reasons why most European countries have struggled to trigger and sustain a flourishing VC sector despite all the government efforts lavished over the years. They also draw conclusions based on their findings.

The deliverable has resulted in two distinct papers. The former (on the literature review) has passed the first hurdle at the *Journal of Economic Surveys* and it is currently under revision for being re-submitted. The latter has been accepted and is forthcoming in *Small Business Economics* (available [here](#)).

Task 2.3: The institutional evolution of knowledge creation in Europe and entrepreneurship

The purpose of this task is to identify the most important institutions that hamper or favor knowledge circulation, and analyze them historically. This task aims to bridge the gap between history and the future, connecting the historical analysis in this work package with the forward-looking reform proposals in later work packages.

In [D2.4](#), entitled “The institutional evolution of knowledge creation in Europe and entrepreneurship”, Selin Dilli and Gerarda Westerhuis focus on the historical evolution of the gender differences in Science, Technology, Engineering and Math (STEM) education and their relevance for the cross national differences in the different forms of entrepreneurial activity in 19 European countries and the United States. This is because while many factors related to knowledge institutions contribute to entrepreneurial outcomes, one crucial determinant of entrepreneurship is education. Both among policy makers and scholars, recent attention has been directed to the importance of gender differences in the field of education for entrepreneurship, although the empirical evidence remains scarce. In a multilevel analysis, they show that countries with greater gender equality in science education are characterized by higher entrepreneurial activity in knowledge-intensive sectors and high-growth aspirations. They also show that these gender differences in STEM education are historically rooted. Despite the increase in the share of the population receiving science education and female population in tertiary education since the 1970s, women remain underrepresented in science education. Therefore, they call for a historical perspective for a better understanding of the reasons behind why women do not choose a STEM education. The working paper has been revised and accepted for publication in *Small Business Economics* with the title “How institutions and gender differences in education shape entrepreneurial activity: a cross-national perspective”. The paper can be downloaded [here](#).

An earlier version of this work, focusing on the Netherlands and the U.S. as case studies based on a qualitative approach, was presented at a business history [conference](#) in Berlin and at Copenhagen Business School in May 2016.

Task 2.4 The institutional evolution of labour market institutions in Europe and entrepreneurship

The purpose of this task is to analyze the effects on entrepreneurship of the institutions governing the allocation of labor and talent in society.

In deliverable 2.5, entitled “The diversity of labor market institutions and entrepreneurship”, Selin Dilli re-evaluates the link between labor market institutions and entrepreneurial activity by considering the complementarity between institutions as emphasized by the varieties of capitalism literature. The paper studies the (co-)evolution of labor market regulations, wage setting institutions and social security along with their links to different types of entrepreneurial activity in 18 European countries and the United States. Three findings stand out. First, cluster analysis reveals five distinct bundles of labor market institutions in Europe, many of which have persisted since the mid-1980s. Second, these institutional constellations in labor market institutions support different forms of entrepreneurial activity. Third, the relationships between single labor market institutions and entrepreneurial activity change in each institutional constellation. Therefore, to promote entrepreneurship in Europe, similar to Dilli et al. (2018), this paper argues that there is a need for tailored reform strategies that consider the (long-term) diversity of the institutional constellations. The paper has been re-submitted to the *Socio-Economic Review*. A working paper version is available [here](#).

Magnus Henrekson (IFN) and Tino Sanandaji (Stockholm School of Economics) have updated their database on billionaire entrepreneurs and conducted a study where they document differences in super entrepreneurship among EU member countries and in the EU relative to the U.S. and Asian countries, including China.

Their study ([D2.6](#)) entitled “Schumpeterian entrepreneurship in Europe compared to other industrialized regions” is available as a [working paper](#) and has been submitted to the *International Review of Entrepreneurship*. The study explores whether Europe has an “entrepreneurship deficit” compared to other industrialized regions. Cross-country comparisons are difficult due to the lack of standard empirical definitions of entrepreneurship. Measures focusing on small business activity, self-employment and startup rates suggest that Europe has higher rates of entrepreneurship than the United States. However, most business activity is not entrepreneurial in the Schumpeterian sense. The study relies on empirical measures that more closely tally Schumpeterian entrepreneurship. The main measure is self-made dollar billionaires per capita identified from the *Forbes Magazine* annual list, and who earned their wealth by creating new firms during the 1996–2015 period. Comparisons are also made of venture capital investment as a share of the economy, the number of successful unicorn startups and the number of top global firms founded since 1990. Western Europe is shown to underperform in these measures of high-impact entrepreneurship. The “entrepreneurship deficit” is even larger once account is taken of Europe’s advantages in terms of high average income and strong performance in technological innovation. Potential institutional causes for the entrepreneurship deficit are discussed and some policy conclusions are drawn.

Task 2.5 Megatrends and the transition from a managed to an entrepreneurial economy in Europe

This task aims to describe the trends and developments which will influence future societal and economic developments relevant for FIRES. These foreseeable trends may interact and affect the effectiveness of institutional reforms in Europe studied in FIRES.

Deliverable [D2.7](#) “Megatrends and the transition from a managed to an entrepreneurial economy in Europe” by Ward Munters and Axel Marx aims to bridge the gap between history and the future by providing insights and considerations for connecting the more historical analyses under FIRES with its forward-looking institutional reform proposals to promote European entrepreneurship. The study has the following three aims:

- to map these megatrends on the basis of existing studies by several international organizations and research institutes.
- to select the megatrends with significant impact on knowledge institutions, financial institutions and welfare institutions influencing entrepreneurship and the creation of an entrepreneurial economy.
- to identify the crucial challenges resulting from these megatrends for institutional reform.

The specific aim was to identify, through a literature review of relevant studies, various “megatrends” that drive the need for promoting an entrepreneurial society in Europe as well as the desirability thereof, now and into the future. Whereas the analysis of megatrends lacks a stringent theoretical framework or terminology, there appears to be a consensus in the reviewed literature attempting to identify these strands of global exogenous change: the impact on society will be pervasive and

significant – even if the nature of the impact’s concrete consequences may vary from “negative” to “positive”, depending on the qualitative analytical perspective of the study.

Deliverable [D2.7](#) provides a systematic review of the literature on megatrends and focuses on two trends more in-depth which are relevant in the context of the FIRES project. First, the report introduces and discusses the idea of megatrends. On the basis of a literature review, it then provides an overview and a mapping of existing studies and provides for each study a synoptic factsheet. Building on those findings and a number of consultations, the report then casts light on two megatrends in more detail, namely technological innovation and demographics. Finally, the report summarizes the main findings.

The 80-page report was submitted on time in May 2017. An academic paper was produced on the basis of the report and submitted to the *Journal Innovation* (under review). The report was also extensively discussed during the FIRES meeting and workshop in Athens in October 2017.

Highlight of clearly significant results

- An elaborate and well-structured overview of 9 relevant institutional areas for reform published in an open access Springer brief
- Five published papers connecting historical analysis and deep rooted institutions to relevant institutional arrangements driving entrepreneurial activity and outcomes in present day Europe, zooming in on specific institutional arrangements governing finance ([D2.2](#), [D2.3](#)), labour ([D2.5](#), [D2.6](#)) and knowledge ([D2.4](#)).
- A systematic and elaborate review of important (mega)trends that link the future to the past and help establish the urgency for making a transition towards a more entrepreneurial Europe.

Deviations form Annex 1

It proved beyond the scope of any of the deliverables to try and cover the vast diversity and heterogeneity of European historical experiences and institutional specificities on any of the three broad areas that were identified as relevant in the proposal. It was quickly concluded from the work in [work package 2](#) that a sensible approach would have to zoom in. In the papers produced in this work package this was done on a specific theme or aspect that was deemed relevant, opportune and feasible. The country studies underlying the tailored reform strategies for Italy, Germany and the UK were complemented with a more broad historical overview of these respective countries’ institutional histories on finance, labour and knowledge, respectively. These were delivered in [work package 5](#), [D5.12](#) Part II.

Use of resources (will be provided with the final financial reporting):

WP2				
Partner Number	Partner Name	PMs planned	PMs spent	PMs remaining
1,0	UU			
2,0	KUL			
3,0	FSUJ			
4,0	UPRC			
5,0	PTE			
6,0	POLIMI			
7,0	IST			

8,0	IFN			
9,0	LSE			
	Total			

1.2.3 Work package 3

Summary of progress towards objectives

The tasks in this work package are all geared towards obtaining new evidence and a better understanding of the effects of entrepreneurship, institutions and structural change on growth in the EU. In particular, this work package aims to identify and analyse how entrepreneurship and institutions drive related variety at national and regional (NUTS2) levels and how, in turn, related variety, entrepreneurship and institutions affect national and regional growth and new value creation. The work package provides evidence for the desirability of the transition towards a more entrepreneurial society by analysing the ways in which entrepreneurial processes foster inclusive and sustainable growth in the EU. These include new job creation, better governance, alternative opportunities for outsiders on the labour market, non-monetary rewards from entrepreneurship and effectuating knowledge spill overs in the economy.

All these objectives have been achieved within the foreseen time frames.

Details for each task executed

Task 3.1: A review of the literature on the effects of related variety on growth at the national and regional level

[D3.1](#): A review paper from task 3.1 on indicators and growth effects of related variety at the national and regional level in the EU

A survey on related variety and economic growth has been submitted to the EU in February 2016 (deliverable [D3.1](#)) according to the plan. A paper based on this review was delivered and published in a peer reviewed journal.²

The review of 21 studies makes clear that most studies find support for the initial hypothesis that related variety supports employment growth, though some studies suggest that the growth effects of related variety may be specific to knowledge-intensive sectors only. A number of further research questions regarding methodology, the role of unrelated variety, different forms of relatedness and the effect of related variety on knowledge production and entrepreneurship is identified.

Task 3.2: Construction of pan-European database at national and regional (NUTS2) levels including sectoral data, product data, task data and derived indicators of relatedness (UU)

[D3.2](#): Pan European database with new indicators of related variety at national and regional (NUTS2) level; related variety indicators based on sectors, products and tasks

² Content, Jeroen and Koen Frenken (2016). Related variety and economic development: a literature review. *European Planning Studies*, 24, 2079-2112

Data on industry composition, entrepreneurship and regional growth based on various sources such as Amadeus (Bureau van Dijk), the Global Entrepreneurship Monitor as well as more detailed country-level datasets was collected. A description of the data set was delivered to the EU.

Task 3.3: Empirical analysis of drivers of related variety at national and regional level in EU

[D3.3](#): EU-Report based on the study outlined in task 3.3:

A report on the drivers of related variety has been delivered to the EU. The empirical analysis focusses on the role of knowledge intensive business services, involvement in global value chains, and the performance of R&D for the ability of regions to diversify into unrelated industries. It is found that these three factors do indeed enable diversification into unrelated industries thereby improving regional resilience.

Consultation workshop for stakeholders on topics outlined in tasks 3.3-5.

The workshop was organized in Gera, Germany, on August 22 2017. The most important participants were the Minister of Economics of the State of Thuringia (Wolfgang Tiefensee) and the Parliamentary State Secretary in of the Federal Ministry of Economics, Iris Gleicke, who is also the Federal Government Commissioner for the New Federal States and for Small Enterprises. Other participants came from the Federal Ministry of Economics, the Thuringian Ministry of Economics and from several Local Development Agencies.

Policy Brief on studies outlined in tasks 3.3-5.

A Policy Brief based on tasks 3.3-3.5 has been delivered to the EU.

Round Table on the need for the transition to a more entrepreneurial economy.

The Round table was organized on January 25th 2018 in Utrecht. There were about 15 participants from national ministries, regional administrative agencies, and banks. The main topics of the discussion was the role of variety and entrepreneurship for regional development.

Manuscript submitted to peer reviewed journal based on empirical analysis.

A manuscript based on the empirical analysis has been submitted to a peer reviewed journal.

Task 3.4: Empirical analysis of the effects of related variety at national and regional level in EU

[D3.4](#): Empirical analysis of the effects of related variety at national and regional level in EU.

A report based on the empirical analysis of the effects of related variety at national and regional level in the EU has been submitted to the EU. The focus of the analysis is the role of related variety in fostering entrepreneurship. It is found that there is a positive statistical relationship between the related variety in the regional economy and regional opportunity-driven entrepreneurship, while no such relationship is found for necessity-driven entrepreneurship.

Manuscript submitted to peer reviewed journal based on empirical analysis.

A manuscript based on the empirical analysis has been submitted to the editors of a special issue of a peer reviewed journal.

Task 3.5: Patterns in global trade and EU labour markets

[D3.5](#): Report on patterns in global trade and EU labour markets.

The final report has been delivered to the EU on March 31st 2017. The research shows that labour reallocation across tasks is subject to frictions and that these frictions are country-specific. Countries which facilitate labour reallocation across tasks become relatively abundant in non-routine labour and specialize in goods that use non-routine labour more intensively. The routine-intensity of a country's exports is strongly related to its labour market institutions and behavioural norms in the workplace.

Manuscript submitted to peer reviewed journal based on [D3.6](#)

A paper based on the report was submitted to a peer reviewed journal.

Consultation workshop for stakeholders on topics outlined in tasks 3.6, 3.8 and 3.9

A Stakeholder Consultation Workshop was organized on February 28, 2017 in Brussels. Participants came from DG ECFIN, Directorate B, unit B2 (about 15 people, including the head of the unit).

Task 3.6: New job creation and entrepreneurship

[D3.6](#): New job creation and entrepreneurship

A report based on the research has been submitted to the EU. The research focusses on firms that enter de novo, i.e. newly registered firms that start new operations and hire their first employee. In the first years of a cohort, growth rates are strongly increasing in firm size. Growth rates become independent of size as a cohort matures. Both the initial pattern and the subsequent convergence are consistent with the framework of the passive learning model if young firms adjust their size only slowly to new information, for example due to financing or hiring frictions.

Manuscript submitted to peer reviewed journal based on the Report on New job creation and entrepreneurship.

An academic paper based on the report has been submitted and published in a peer reviewed journal.³

Policy Brief on studies outlined in tasks 3.6

A Policy Brief on "Job creation by new starters" that draws main policy conclusion from the research in Task 3.6 has been submitted to the EU in February 2018.

Task 3.7: Social and corporate responsibility and governance in young SMEs

[D3.7](#) Social and corporate responsibility and governance in young SMEs

A report has been submitted to the EU. Based on literature review and some own empirical evidence, the report concludes that a transition to a more Entrepreneurial Society will probably increase the overall adoption and implementation of corporate social responsibility compliant behaviour in the

³ Geurts, Karen and Johannes Van Biesebroeck: Firm creation and post-entry dynamics of de novo entrants. International Journal of Industrial Organization, 49, 2016, 59–104

economy. Such a transition would be more challenging in low-trust societies. The report states, however, that such conclusions should be regarded with caution because the empirical evidence is still rather incomplete.

Policy Brief on studies outlined in tasks 3.7

The results are summarized in a Policy Brief that has been submitted to the EU.

Manuscript submitted to peer reviewed journal based on D3.7

A manuscript based on the report has been submitted to a peer reviewed journal.

Consultation workshop for stakeholders on topics outlined in tasks 3.7

A Stakeholder Consultation Workshop took place on May 23rd 2017 in Utrecht.

Task 3.8: Entrepreneurship and inclusive growth in EU

[D3.8](#) Entrepreneurship and inclusive growth in EU

A report was delivered to the EU. The task investigated how the performance of firms set up by senior entrepreneurs outcomes and senior entrepreneurs' career history (industry experience and unemployment spells prior start-up) relate with overall business satisfaction. Questionnaires were sent out to all private sector companies founded (by entrepreneurs aged 50 or more) between 2004 and 2009 in Portugal. The company contacts were obtained from the Gabinete de Estudos e Estratégia (GEE) at the Ministry of Economy. 208 valid responses from "senior entrepreneurs" were received. Main variables of interest were human capital, pecuniary and non-pecuniary incentives, as well as motivations and satisfaction with the company.

Main findings:

- senior entrepreneurs derive more satisfaction from non-monetary than monetary outcomes (although monetary outcomes also play an important role).
- senior entrepreneurs endowed with the same industry experience—vis-à-vis with no previous experience in the same industry—derive higher business satisfaction.
- senior entrepreneurs who have experienced a long (12 or more months) unemployment spell before starting their current business derive significantly lower levels of business satisfaction.

These findings provide novel insights into the phenomenon of senior entrepreneurship and shed new light on the subjective assessment of senior entrepreneurship performance that should be taken into consideration by scholars and policymakers.

From a policy perspective it is important that mechanisms supporting older entrepreneurs account for: (i) the definition of realistic expectations for the business, (ii) awareness regarding the right tangible and intangible resources required for the business without compromising senior entrepreneurs' future life; (iii) entrepreneurial dynamics during early stages of firms' life cycle because older individuals may not have time to recover from their (financial and psychological) losses if the firm fails and individuals face a discontinuity in their occupation; (iv) the need for tailored training programs, mentoring or other

type of initiatives that contribute to improve firm financial performance. Promotion programs should encompass mechanisms to improve latent/nascent senior entrepreneurs' mental health and increase their self-efficacy, rather than just support the start and development of firms without guaranteeing a set of stable initial conditions.

Manuscript submitted to peer reviewed journal based on D3.8

An academic paper based on the report was submitted to a peer reviewed journal.

Task 3.9 Institutions, entrepreneurship and wellbeing.

[D3.9](#) Institutions, entrepreneurship and wellbeing

The achievement of Task 3.9 is well documented in [D3.9](#) "Self-Employment and Well-Being Across Institutional Contexts." This report investigates the extent to which job and life satisfaction varies between self-employed persons and paid employees across 32 European Countries. The results indicate that entrepreneurship-friendly institutions in a country are conducive to the well-being of self-employed. The quality of entrepreneurial institutions also increases the levels of well-being of paid employees, but the effect is more pronounced for the self-employed. This result suggests that improving the institutional framework for entrepreneurs is a pareto optimal political strategy.

Manuscript submitted to peer reviewed journal based on D3.9

A manuscript based on the report on institutions, entrepreneurship and wellbeing was submitted to a peer reviewed journal.

Task 3.10: Knowledge creation and diffusion and entrepreneurship in EU

[D3.10](#): Entrepreneurship and innovation - Report based on the study outlined in task 3.10

A report of the research done in Task 3.10 has been submitted to the EU. The research examines the drivers of highly skilled migrants across space as well as their impact on local innovation. The evidence shows that similarity in technological production structure between countries is the main driver of inventor moves—especially for inventors from the most innovative countries, whereas cultural proximity matters more for non-inventor migrants. Attractive country features are the quality of institutions, job opportunities and early stage entrepreneurship at the destination as well as trade linkages between origin and destination country. Finally, knowledge and skills that move with the inventors—and particularly their origin—have a positive impact on local innovation production.

The study concludes that given the important economic contribution of inventors, countries should become more attentive to the quality, accountability and effectiveness of their home institutions and further to their immigration policies, as the latter could become more welcoming to skilled people. Fostering skilled migration is a powerful policy option. Active policies should be designed in order to remove existing barriers to labour mobility: from entry restrictions to institutional/regulatory barriers. Conversely, taking a hard line stance on immigration policy, it would potentially threaten a country's ability to attract the brightest and best migrant innovators and hamper its growth potentials.

Manuscript submitted to peer reviewed journal based on D3.10

An academic paper based on D3.10 was submitted to a peer reviewed journal.

Round Table on entrepreneurship and innovation in Europe

A Round Table with policy makers to discuss the FIRES-proposed reforms to strengthen the institutional framework for innovative entrepreneurship in Greece was organized on January 19, 2018 in Piraeus. All participants shared their concerns, reservations and support for the relevant proposals. They agreed that role of the universities and intellectual property rights is to facilitate the knowledge creation and transmission. In doing so, European commission and institutions should remove hurdles and rigid regulations that eventually achieve the opposite effect.

Highlight of clearly significant results

- A novel comprehensive European database at national and regional (NUTS2) levels including sectoral data, product data, task data as well as information on new business formation has been developed. This data is particularly well-suited to an analysis of the effects of related and unrelated variety on regional development.
- The new European database was well-suited for a comprehensive analysis of the factors that are conducive to regional diversification into unrelated fields that may make regions less vulnerable to external shocks.
- Institutions play an important role for the effect on trade and international division of labour. They are also rather important for mobility of inventors that may lead to considerable knowledge spillovers.
- It has been shown that non-pecuniary benefits of self-employment play significant roles and that the level of such non-pecuniary benefits is higher in a more entrepreneurship enhancing institutional framework.

Deviations from Annex I

Only in Task 3.7 a small pivot relative to the original planning was required. As it turned out to be hard to recruit a suitable post-doc candidate to execute the foreseen research, it was decided to hire a PhD-student for a little more time to execute and analyse a set of field experiments that had already been undertaken as part of the stakeholder engagement activities in the fall of 2015 in Hamburg. This experiment tests for pro-social behaviour and was implemented among entrepreneurs to investigate their tendencies and abilities to collaborate for the common good. The experiment was then repeated to increase reliability in the summer of 2016 at [TechOpenAir Berlin](#) and results were reported in [D3.7](#) together with an elaborate literature review on the link between small and medium sized governance and social corporate responsibility. The experimental approach was not foreseen in Annex I but an opportunity that presented itself. The manuscript developed on the basis of [D3.7](#) was submitted and rejected and is being prepared for submission at a high-ranked peer reviewed journal in June 2018.

Use of resources (will be provided with the final financial reporting):

WP3				
Partner Number	Partner Name	PMs planned	PMs spent	PMs remaining
1,0	UU			
2,0	KUL			
3,0	FSUJ			
4,0	UPRC			

5,0	PTE			
6,0	POLIMI			
7,0	IST			
8,0	IFN			
9,0	LSE			
	Total			

1.2.4 Work package 4

Summary of progress towards objectives specified in Annex 1

The overall purpose of the work package was to develop the tools to assess the quality of the entrepreneurial ecosystems in the EU. An effective tool for making such evaluations is key in designing effective policy proposals and monitoring progress. Starting point in this work package is the Global Entrepreneurship Index (GEI), that offers a validated methodology for making such assessments. The index, however, was originally developed for all countries in the world and the choice of underlying variables was greatly restricted by data availability. For the European Member states more, better quality and longer time series are available for many more variables. In addition, a lot of the relevant information can also be collected at sub-national and regional levels. To make the GEI methodology suitable for our purposes, several adjustments, updates, and changes to the index were therefore proposed in this work package. The work was divided into six subtasks. Work on all tasks has been concluded according to plan although organizational issues have caused some delays. These are discussed below in detail. The reason for the delays is twofold. First, the work package leader, Professor Zoltan Acs, left his position at London School of Economics (LSE) in December 2015. This made it impossible to hire a research assistant through LSE and plans had to be adjusted. Second, it proved impossible to hire the foreseen Ph.D. at Utrecht University (UU) for the budgeted 18 PMs in [work package 4](#). These complications implied we had to shift work and resources, which took a significant amount of time. In the end we have shifted most of the work and resources to Pecs University, where much of the data collection and the GMR modelling work was to be done anyway. The resources and work at UU have been redistributed to Dr. Niels Bosma and Mr. Jeroen Content, the FIRES-Ph.D. student active in WP3. This combination made sense because there is some overlap in the data collection at the regional level and Dr. Bosma is the expert on regional entrepreneurship data. The work package leadership and executive board position of Professor Acs, as well as some of his tasks in [work package 4](#) were assumed by Professor Erik Stam and Dr. Mark Sanders. As [Advisory Board](#) member, Professor Acs was still formally connected to the project and could liaison between Pecs and Utrecht University to help keep progress in the work package on track.

Details for each task executed

Task 4.1: Developing a time series of GEDI for the European Members States

This task involved two deliverables, [D4.1](#) and [D4.2](#). As [D4.1](#) has been prepared and submitted to the Commission within the 1st period of the project (March 2016), researchers of PTE focused on [D4.2](#). This deliverable contained the calculation a new dataset of Global Entrepreneurship Index (GEI – formerly GEDI, Global Entrepreneurship and Development Index), a report on this dataset, a policy brief based on the results of the calculated GEI scores and manuscript was submitted to a high-quality

journal. The GEI index measures the quality of the National System of Entrepreneurship at the country level. Before its calculation, the index has been restructured and a couple of indicators have been replaced by new measures. A detailed review of the restructuring process can be found in the report submitted within [D4.1](#). In addition to the new structure, the second step was to extend the investigated time period. Data have been collected from the annual survey of Global Entrepreneurship Monitor (GEM) on the one hand and from different global as well as European datasets on the other hand. Based on the available data, it was decided to calculate the index for 2006–2015 period on 26 EU countries (all EU countries except Cyprus and Malta). However the data availability of different countries was uneven, as data for a couple of countries could be collected for the whole period, but there were missing years in the case of other countries. A few missing data could be replaced through interpolation, but this tool could only be applied when data was lacking only for one year or two years. The dataset served as a milestone of the whole project (MS4 – A Pan-European database with time series for GEDI), so it was originally planned to be submitted by June 2016. As the calculation process was delayed by two months, the final version of the dataset was submitted by the end of July 2016. Later, the dataset served as input for UU in order to prepare [D4.3](#) within Task 4.2. Other documents belonging to [D4.2](#) are expected to be submitted by the end of May 2018. The report on GEI dataset and the policy brief based on GEI calculations has been submitted by April 2018 for internal review. These documents were primarily prepared by the research assistant whose person months were allocated from LSE to PTE (the RA was hired in February 2017). The report contains a short summary on the theoretical background of the GEI and a detailed explanation on methodological issues and results. Furthermore, it provides the policy application of GEI through a couple of simulations that shed light on the bottlenecks in the National Systems of Entrepreneurship in the European countries. The policy brief provides a short summary of the above mentioned results and policy recommendations. The manuscript belonging to [D4.2](#) has been published in Small Business Economics journal by March 2018.⁴ This paper investigated the relationship among country level entrepreneurial ecosystem (National System of Entrepreneurship) and economic growth.

Task 4.2: Time series and panel data analysis of GEDI and growth performance indicators

(Deliverable [D4.3](#) – UU)

Task 4.2 specified a time-series and panel data analysis of GEDI and growth performance indicators. The team at Utrecht University started working on this task from the departure point of growth performance indicators and decided to follow the empirical academic literature in first specifying a baseline growth model as in Mankiw, Romer and Weil (1991) and Islam (1999). The underlying intuition in the GEI-index methodology is to then combine institutional variables and entrepreneurial variables in a single index. It would be possible to introduce that index as an independent variable in a straightforward first differenced production function, where GDP growth is regressed on traditional inputs and the GEI-index (as in Acs et al. 2018 mentioned above). Before taking that shortcut, however, it was decided to test more elaborately the validity of the GEI's underlying assumption that institutions affect growth through their effect on entrepreneurial activity. To carefully separate and identify the causal effect of institutions through entrepreneurship on European countries' GDP growth, a three

⁴ Acs, Z. J., Estrin, S., Mickiewicz, T., & Szerb, L. (2018). Entrepreneurship, institutional economics, and economic growth: an ecosystem perspective. *Small Business Economics*, 1-14.

stage least squares specification of the standard Islam (1999) panel growth regression model was proposed and estimated, using primary data collected in [D4.1](#) and [D4.2](#). In the first stage the impact of a subset of institutions that also feature in the GEI-index were regressed on a very broad and noisy measure of entrepreneurial activity (Total Entrepreneurial Activity in GEM). In the second stage the fitted values of this first stage regression were used as regressors in a properly specified panel growth regression to identify the impact of these institutions on growth through their effect on the quality of entrepreneurial venturing. Results in this report confirm the underlying intuition in the GEI methodology that institutions moderate the effect of entrepreneurial activity and cannot be ignored in empirically assessing the quality of entrepreneurial ecosystems. The resulting report was submitted and accepted for publication in the special issue of *Small Business Economics Journal* as Bosma et al (2018).⁵ Together the manuscripts coming out of tasks 4.2 and 4.3 make a set of papers highlighting different elements and aspects of the FIRES empirical work on the interplay between institutions and entrepreneurship.

Task 4.3: Assessing Europe's entrepreneurial ecosystems at a regional level

Task 4.3 involves one Deliverable ([D4.4](#)) and its main target was to prepare a measure in order to measure entrepreneurship on the regional level. PTE team received the regional level entrepreneurship dataset from the Utrecht team by June 2016. As the first version of Regional Entrepreneurship and Development Index (REDI) has already calculated in 2013, the structure of REDI had to be reviewed and the temporal extension of this measure had to be developed. Since the regional entrepreneurship dataset contains regional level GEM data for 2007–2014, two periods have been created: 2007–2011 (as in the original REDI version) and 2012–2014 (as extension of the former dataset). Altogether 125 NUTS 1 or NUTS 2 regions have been involved from 24 EU countries. Due to lack of data for Bulgaria, Cyprus, Luxembourg and Malta, these countries had to be excluded. As the former dataset was extended, the former scores were recalculated as well, so the results of the two investigated periods could be compared to each other. The original version of the new REDI dataset which served as Milestone 5 of the project was submitted by December 2016. However, a few corrections had to be implemented, so the latest version has been finalized by June 2017. The preparation of the report was also supported by the research assistant whose person months were allocated from LSE to PTE (the RA was hired in February 2017). The report on the dataset and the policy brief with simulations on improving regions' REDI scores were submitted by April 2017 for internal review. After receiving valuable comments and suggestions from the reviewers, the revised version of these documents has been finalized and submitted by July 2017. The dataset served as input for [D4.5](#) and [D4.6](#) (see below as Task 4.4 and 4.5) as well as for the institutional reform strategies for Germany, Italy and the UK ([D5.12](#)).

Task 4.4: Cross-sectional analysis of REDI and regional growth performance measures

(Deliverable [D4.5](#) UU-PTE)

This task involves one Deliverable ([D4.5](#)). There were two items of the deliverable: a report about the cross-sectional analysis of REDI and regional growth performance measures and a manuscript in the

⁵ Bosma, N., Content, J., Sanders, M., & Stam, E. (2018). Institutions, entrepreneurship, and economic growth in Europe. *Small Business Economics*, 1-17.

same topic. Originally, this task was led by UU, but finally it was a joint work of PTE and UU. PTE provided the REDI dataset and its results for the analysis, and UU prepared the theoretical context and the explanation of the results. It has been submitted by October 2017 for internal review and the final version was prepared by the end of November 2017. This study seeks to put entrepreneurial ecosystems at the very centre of the processes of regional economic development. The manuscript based on the report delivered for this task has been submitted in October 2017 to the Regional Studies Journal and is currently under review.

Task 4.5: GMR model for Europe linking Entrepreneurship, Institutions, and Growth

(Deliverable [D4.6](#) - PTE)

This task involves the further development of the GMR-Europe economic impact assessment model to facilitate impact evaluation of policies supporting entrepreneurship for European regions. The GMR-framework is rooted in different traditions of economics: in addition to modelling the spatial patterns of knowledge flows and the role of agglomeration in knowledge transfers it also accounts for interregional trade and migration in a general equilibrium context. The GMR models are structured around three model blocks. The Total Factor Productivity (TFP) block is able to capture the role of innovation-related factors such as R&D, human capital, entrepreneurship and knowledge networks in productivity growth at the regional level. A spatial computable general equilibrium (SCGE) block allows for the estimation of regional allocation and reallocation of resources as well as trade and migration as a result of given policy interventions. Finally, a macroeconomic (MACRO) model block generates the dynamics of key variables like employment, investment, capital stock. The complex interaction of these model blocks allows us to estimate the likely impacts of different policy interventions both at the regional and aggregate levels in several dimensions (GDP, productivity, employment, etc.). A novel feature of the present development of the GMR-Europe model is its capability to integrate policies targeting entrepreneurship. This is achieved by using the REDI index as a factor affecting regional productivity and through productivity also the economic development of the given region. Dynamic interactions through trade and factor mobility affect and feed back to the dynamics of other regions as well. We have also carried out some policy impact simulations. We show that although the key driver of regional economic growth is productivity, there are differences as to what extent the same relative improvement affects regional productivities and also, the dynamic feedback mechanisms within the model generate diverse path for regional output levels in response to the shock implemented. In addition to the report describing the novel GMR model we also produced a policy brief and a scientific paper. The paper has already been submitted to Small Business Economics Journal and is currently under review.

Clearly significant results of WP4

- More reliable entrepreneurship system (GEI) and regional entrepreneurship ecosystem (REDI) measures elaboration
- Papers were published or are under review that show both GEI and REDI positively correlate with TFP (GEI) and growth of gross value added and employment (REDI) in Europe.
- A paper was published to support the general underlying intuition in GEI and REDI that institutions affect the quality of entrepreneurship.

- The elaboration of REDI as a policy tool. Provision of entrepreneurship policy mixes REDI alone and as a part of the GMR inputs. Detailed alternative policy scenarios for Germany Italy and Hungary.

Deviations from Annex I

Originally, in [work package 4](#) 2PM of senior time plus 16PM of RA was allocated to LSE (at a total budget excluding overhead of €43,000 plus €64,560 respectively). When Professor Zoltan Acs left LSE, the budget allocated for his work and the PMs for his research assistant (minus resources already spent) were reallocated between UU and PTE. PTE hired a research assistant in February 2017 that was employed till the end of the project in May 2018 (15PM). The remainder of the budget was used up for extra work done by the beneficiaries in the PTE FIRES team. At UU the remaining budget for senior time (€40,000) was allocated to senior researchers Professor Erik Stam, Dr. Niels Bosma and Dr. Mark Sanders to take over tasks of Professor Acs foreseen throughout the work package. All budget reallocations were agreed upon with the Commission Project Officer and formally put into an amendment to the Consortium Agreement.

MS4 was submitted a month behind schedule. This did not lead to any further delays or problems in the project. There was also a 2 months delay in the final submission of [D4.4](#) as the first version was submitted in time, but a couple of corrections had to be implemented according to the reviewers' comments and suggestions. These took a bit more time than originally scheduled. This too, did not lead to any further delays or problems.

In the GMR modelling instead of the United Kingdom, Hungary was analysed because in the GMR-Europe model data for the UK are to date unavailable. This country level policy experiments, however, were additional on the originally proposed analysis anyhow.

Use of resources (will be delivered later pending final financial reporting)

WP4				
Partner Number	Partner Name	PMs planned	PMs spent	PMs remaining
1,0	UU			
2,0	KUL			
3,0	FSUJ			
4,0	UPRC			
5,0	PTE			
6,0	POLIMI			
7,0	IST			
8,0	IFN			
9,0	LSE			
	Total			

1.2.5 Work package 5

Summary of progress towards objectives specified in Annex 1

[Work package 5](#)'s core objective is to illustrate the usefulness of our approach in working out a reform strategy for three member states (representing three distinct institutional families) in full detail thereby identifying the opportunities for, and limits to, entrepreneurship policies in Europe. Following-up on the insights gained in the previous work packages, we thus asked: Which institutional reforms would successfully promote entrepreneurial activity in different institutional settings? To address this question, the work package had 5 tasks:

- 1) Collecting internationally comparable data on start-up processes in Germany, Italy, the UK and the US.
- 2) Reveal country-specific typologies of start-up processes using sequence analysis.
- 3) Analysing the impact of institutions on start-up processes in Germany, Italy, the UK and the US.
- 4) Collecting case studies on creating, developing and funding entrepreneurship in Europe.
- 5) Formulating a country-specific institutional reform strategy for Germany, Italy and the UK.

All five objectives have been achieved within the foreseen time frames.

Details for each task executed

Task 5.1: Collection of internationally comparable data on start-up processes in Germany, Italy, the UK and the US

The achievement of objective 1 is illustrated in detail in deliverable 5.1 “Internationally comparative dataset on start-up processes and their institutional foundations in Germany, Italy, the UK and the US”. We named the data collected the “perfect timing (PT) database” as it traces the timing of start-up activities throughout the venture creation process on a monthly basis. The sample for this study was drawn from the Orbis database, which provides internationally comparable company profiles. A rigorous catalogue of selection criteria was developed and applied to arrive at a meaningful sample. To collect data in Germany, the US, the UK, and Italy, the call centres IFF, Information Alliance and BMG were contracted after a thorough selection process. While these call centres recruited venture founders for an interview, the actual interviews were conducted by an interviewer team of research assistants, based at Utrecht University, whom were selected and rigorously trained. Taken together, these data collection efforts enabled the recruitment of 820 and completion of 539 interviews – of the overall 800 interviews envisaged within FIRES. Together with the already existing data of an earlier Marie Curie project, the PT dataset now includes 1044 of the overall 1200 envisaged interviews.

The lower recruitment and, hence, completion rates in the UK and Italy were caused by the more limited samples available, in particular for alternative energy ventures. In the UK, entrepreneurs often shied away from setting-up alternative energy ventures because of frequent and, thus, unpredictable regulatory changes. In Italy, on the contrary, entrepreneurs repeatedly indicated to set-up alternative energy ventures, (thus obtained the related subsidies,) but ultimately abstained from executing their plans. Irrespective of any subsidy provisions, venture creation in the information and communication industry was also more limited in Italy.

Despite the slightly more limited database for Italy and the UK, the PT dataset has been well received by national and international scholars. Thanks to the high data quality, its completeness and reliability, the PT database offers the unique opportunity to trace venture creation activities on a monthly basis and in comparison to other institutional environments (regions or countries). What is more, the dataset explicitly includes questions that allow to merge it with other databases, in particular the PSED dataset.

While data collection was just completed and data cleaning still is in full swing, research collaborations are already pursued with Cornelia Storz (Professor of Institutions and Innovation Economics, Goethe Universität Frankfurt a.M., Germany), with Gresa Latifi and Luca Grilli (Associate Professor of Business and Managerial Economics at the Politecnico di Milano, Italy), and with Friederike Welter and her team (President of the “Institute für Mittelstandsforschung”, Bonn, Germany). Furthermore, and as a follow-up to the policy round table in Berlin on 24 April 2018, several representatives of the German Ministry of Economic Affairs (Bundesministerium für Wirtschaft und Energie) indicated their interest to learn more about the data collected with the aim of formulating more fine-grained policy recommendations. The data collected within the FIRES framework has thus already achieved its aim of becoming an important source for scholarly research on venture creation.

Task 5.2: Country-specific typologies of start-up processes using sequence analyses

Given that sequence analyses are highly novel and, thus, still less well-known, a separate deliverable (subsumed under [D5.1](#)) explains how sequence analyses work and how they can be applied to “reveal country-specific typologies of start-up processes”. Importantly, sequence analyses can be conducted in different forms. Optimal matching approaches are one of the most widely used forms of sequence analyses.

Ever since optimal matching (OM) analyses were used to decode the human genome, they became an established method in scientific disciplines as diverse as biology, computer science, and sociology. Given that OM analyses can identify patterns of trajectories characterized by timely ordered events, they are an ideal tool for longitudinal analyses of venture creation processes. Importantly, though, they have hardly been used in entrepreneurship research to date. To pave the way, the deliverable explains how OM sequence analyses work and demonstrates how they can be applied to venture creation research. To this end, parts of the PT database (described above) are analysed with OM techniques. These analyses illustrate how founder involvement in venture creation differs across the institutional environment of Germany, Italy and the UK – also in comparison to other venture characteristics.

Task 5.3: The impact of institutions on the process of team-formation, finance and know-how acquisition in Germany, Italy and the UK

On the basis of the dataset and the OM sequence analyses described in tasks 5.1. and 5.2, three additional deliverables (subsumed under deliverable 5.1) illustrate country-specific differences in (1) team-formation, (2) finance-acquisition, and (3) knowledge development processes and link these to the country’s institutional environment.

Accordingly, the “manuscript submitted to peer reviewed journal focusing on labour” illustrates how the composition of a firm’s human resources is shaped by national labour-market institutions. Based on sequence analyses, the paper demonstrates that, and how, team formation processes differ over

time in terms of founder and employee involvement, as well as the hiring of service providers: In particular, founders in regulated labour markets (Germany) are significantly more likely to slowly increase their time commitments within founder teams rather than embarking on venture creation full-time from the outset. Furthermore, entrepreneurs in regulated labour markets rather hire external service providers than employees in order to recruit the necessary human resources. The reluctance of Germany's founders to fully commit themselves to venture creation early on, as well as their preference to hire external labour (service providers) rather than internal labour (employees) can both be explained by employment protection prohibiting hire-and-fire at short notice. The manuscript was accepted for publication in Small Business Economics and is downloadable [here](#).

The "manuscript submitted to peer reviewed journal focusing on finance" engages with the 'pecking order' literature, which expects a linear process of finance acquisition. More concretely, new ventures are expected to first access their founders' resources, to then acquire funding from family and friends, and in a last step to acquire equity and debt from external (institutional) sources. Based on sequence analyses, the paper illustrates that new ventures do not pursue one linear, but rather seven distinct approaches to finance acquisition. In economies (such as the US) where a private pension system and the absence of supervisory boards in limited liability ventures facilitate the availability of venture capital, new ventures are more likely to access external equity early on. Similarly, in economies where higher bank deposits facilitate the access to bank loans, new ventures show a higher likelihood of financing their endeavour through loans from the outset. The paper was submitted for review to the Journal of Business Venturing.

The "manuscript submitted to peer reviewed journal focusing on knowledge" investigates the extent to which a venture's institutional environment influences their knowledge and, more concretely, product development processes. Akin to the two previous papers, this manuscript also uses sequence analyses to establish that there is not just one, but rather five distinct approaches towards product development: Ventures do not only develop their products in-house, but also – either exclusively or alternatively – in small-scale research collaborations, or within encompassing industry associations. Interestingly, though, country-specific effects could not be detected, which indicates that product development approaches are not influenced by a venture's institutional environment. Instead, product development processes are rather chosen as a function of the venture's innovativeness, as well as the skill set of founder teams and employees hired. The paper was submitted to Small Business Economics.

Based on the work in Tasks 5.1, 2 and 3, Andrea Herrmann also presented a separate policy brief on German founding processes at the policy round-table in Berlin (see below). This led to the invitation for a follow-up presentation at the German Ministry of Economic Affairs (BMWi) and a paper to be included into the SBEJ special issue on "Entrepreneurship in Context" edited by Ted Baker, Friederike Welter and Katharine Wirsching.

Task 5.4: Case studies on creating, developing and funding entrepreneurship in Europe

To gain an in-depth understanding of the link between entrepreneurial support programmes, their complementarity with national institutions and the distinct characteristics of entrepreneurial ecosystems, the fourth task consisted in completing country-specific case studies. A list of these case studies as well as the researchers responsible for completing them are provided in the table below:

Table 3: Case Studies in WP5

No.	Name and contents of deliverable	Status	Responsible	Inst.
D5.2	<u>An evaluation of London's crowd funding system</u> The case study explores the impact of regulatory changes on the funding of early stage ventures with a particular focus on London as an agglomeration in terms of finance and technology. Empirically, the study is based on desk research and interviews with the heads of the two major UK equity crowdfunding firms (Crowdcube and Seedrs) as well representatives of Nesta and the regulator.	completed and submitted	Estrin	LSE
D5.3	<u>An evaluation of Dutch solo-self employment</u> The study highlights how an increase in the fiscal advantages offered by the Dutch government to self-employed persons led to a raise of self-employment over the past decade, but did not trigger higher rates of innovative entrepreneurship.	completed and submitted	Stam, Liebrechts	UU
D5.4	<u>Intrapreneurship in Sweden: an international perspective</u> This study suggests that intrapreneurship levels in a country are positively affected by levels of generalized trust, which increase job autonomy and welfare state arrangements for employees that ultimately enhances intrapreneurship and make self-employment a relatively less attractive occupational choice. These factors also largely explain the high levels of intrapreneurship in the Nordics and Sweden in particular.	completed and submitted	Stam, Stenkula	IFN
D5.5	<u>An evaluation of German Entrepreneurial ALM</u> The case study reviews the current literature of active labour market policies (ALMP) in Germany, with a special focus on the development of entrepreneurial support programs. The report provides a detailed overview of the current instruments of the ALMP, its development and efficiency at the macro- and micro-level. Main instruments analysed are the bridging allowance (BA) and start-up subsidies (SUS) that are targeted to unemployed people.	completed and submitted	Fritsch, Stam	FSUJ
D5.6	<u>An evaluation of Italy's YIC programme.</u> The case study analyses whether an institutional change can facilitate the transition from quantity towards quality of entrepreneurship. It investigates the effect of the Italian policy intervention targeting Young Innovative Companies on the human capital of entrepreneurs, and how that influences entrepreneurial performance. The study exploits a quasi-natural experiment setting by decomposing the impact of lowering entry and growth barriers. The findings indicate that the reform, and in particular, lowering growth barriers attracts founders endowed with the most valuable experience in the same sector and/or management functions, who are also able to capitalize on the introduced benefits the most.	completed and submitted	Grilli, Mrkajic, Giraudo	POL
D5.7	<u>An evaluation of Greek Philanthropy</u> This case study focuses on Greek philanthropic institutions and their consequences for entrepreneurship. Based on survey data and balance sheets of 260 private foundations that finance educational and research activities, this case study assesses the impact of Greek philanthropy on human capital development and knowledge creation and diffusion in Greece - especially in regions in high need – as well as its impact on regional entrepreneurship activity.	completed and submitted	Xesfingi, Economidou	UPRC
D5.8	<u>An evaluation of the Hungarian new tech entrepreneurial ecosystem</u> This case study depicts and evaluates the state of the new tech entrepreneurial ecosystem in Hungary. The authors' overall impression from the answers of the expert survey is that the Hungarian entrepreneurship ecosystem has many aspects that need improvement in order to become favourable for the emergence of new technology firms. The results indicate that experts evaluate Hungary's performance moderate in Human capital and education, regulatory environment, financing and Support. Policy makers can achieve economic growth with the highest efficiency and efficacy of resource usage, by targeting the mentioned bottlenecks in the way of the development of digital entrepreneurship.	completed and submitted	Szerb, Vörös, Páger, Acs, Komlósi	PTE
D5.9	<u>Stock Option Taxation: A Missing Piece in European Innovation Policy</u> Europe lags behind the U.S. in venture capital (VC) activity and in the creation of successful start-ups, and has recently been surpassed by China. This is despite the fact that many European countries have deep financial markets, strong legal institutions and high R&D spending. This case study points to the tax treatment of employee stock options as an explanation for the stronger growth of the U.S. VC sector. As a response to high uncertainty and transaction costs, VC financiers have developed a model in which founders and key recruitments are compensated with stock options under complex contracts. Low tax rates on employee stock options	completed and submitted	Henrekson, Sanandadji	IFN

	<p>further raise the relative returns of working and investing in innovative entrepreneurial firms, and shift financial capital and talent to that sector.</p> <p>The authors measure the effective tax on stock options in VC-backed entrepreneurial firms in a number of developed economies. Countries with lower stock option taxation have higher VC activity and more high-growth expectation entrepreneurial activity. Based on these associations and the theoretical and empirical literature, the study argues that more lenient taxation of gains on employee stock options can be a strategy for European countries to catch up in entrepreneurial finance. This tax policy would narrowly target entrepreneurial start-ups without requiring broad tax cuts. The favourable tax treatment of stock options allows the state to promote firms that rely on entrepreneurial finance and make use of these types of contracts without lowering taxes for other sectors of the economy.</p>			
D5.10	<p><u>An evaluation of Belgian business succession practices.</u></p> <p>In agreement with the project officer and coordinator, the focus of this case study changed into a <u>case study on Export Patterns of Belgian Firms</u>. There were two reasons for proposing this change. First, the relevant expertise on Belgian Business Succession Practices was no longer available at KU Leuven. Second, substantially, it became apparent, from several consultations that Business Succession Practices in Belgium were not, as originally envisioned, the biggest or most interesting aspect of the Belgian entrepreneurial society. After consulting several experts, we realised that a case study on the export pattern in Belgian firms is more interesting and relevant to our project. To date we did not look at this in any of the other case studies and being exemplary for a small open economy in Europe, the barriers and opportunities to exporting in Belgian firms seemed highly relevant. The case study aimed to obtain a better understanding of firms' export performance. Knowing the driving forces behind export success will support policy makers in the design of export enhancing policies.</p>	completed and submitted	Marx	KUL
D5.11	<p><u>Elderly Entrepreneurship in Portugal</u></p> <p>The case study proposes a preliminary research and policy agenda on senior entrepreneurship (SE) in Europe, with focus on the Portuguese case. The analysis is organized into six key research questions, namely: (i) Why is SE important? (ii) What is the current knowledge & academic research available (and still lacking) on SE? (iii) What are the key supporting initiatives available for SE in the world? (iv) Are academics producing research on SE with practical policy implications? (v) Are policies and supporting initiatives backed up by scientific knowledge? (vi) How can we produce and use adequate knowledge and policies towards SE in Europe.</p> <p>To address these questions and to shed light on how institutions may better support SE, the study offers (a) a comprehensive literature review; (b) an analysis of international programs and initiatives for SE based on secondary data. Additionally, the study focuses on the Portuguese case and provides (c) a thorough description of the national context drawing on primary data; (d) an analysis of senior entrepreneurs' firm entry and growth dynamics by using secondary data; (e) insights into senior entrepreneurs' satisfaction, based on primary data, and a final discussion of policymaking towards SE in Portugal.</p>	completed and submitted	Amaral	IST

Task 5.5: A country-specific agenda for institutional reform to promote Europe's entrepreneurial society

In order to bring our findings to the attention of policy-makers, the fifth task of WP5 consisted in drafting a reform agenda specifically for three member states that represent the institutional families in Europe. This resulted in an overarching book chapter that discusses some 64 proposed policy interventions and in the form of country-specific policy proposals and policy briefs for Germany, Italy, and the UK. The ambition of our consortium to bring together all the academic work in the different work packages in this deliverable. This ambitious project, however, proved beyond the scope (and budget) allocated to this task. Work on developing an encompassing reform agenda was started at the consortium meeting in Utrecht in October 2016, and continued under the responsibility of the project leader, Mark Sanders, throughout 2017. In the Executive Board Meeting of May 2017 it was decided that project leader Mark Sanders would take over full responsibility for developing what is now part I of this deliverable. In the Executive Board meeting of October 2017 in Athens it was decided to

organise the policy round tables connected to this deliverable not in Brussels at the final conference but rather in the spring of 2018 in Rome, Berlin and London respectively. The project leader coordinated with local partners Luca Grilli (Italy), Frederieke Welter (Germany) and Saul Estrin (UK) and coordinated the development of the country reports and corresponding policy briefs. As there seemed to remain some confusion about the final responsibility for this project deliverable, the executive board decided on 25 January 2018 to reaffirm the shift and explicitly transfer the full responsibility for deliverable 5.12 to the project coordinator. We decided not to shift any resources between partners to accommodate the transfer. The resources originally allocated to the team under Andrea Herrmann were thus available to provide (a preliminary) analysis of parts of the survey results for this deliverable. Some of the extra work that was necessary could be financed out of cost savings elsewhere in the project, where the rest was volunteered by various members of the consortium. Work on the country reports and corresponding policy briefs was executed under high time pressure between January and March of 2018 but a joint and concerted effort of all involved resulted in the required reports and deliverables being submitted on time.

All of these policy proposals and briefs are subsumed under [D5.12](#):

Part I: Financial and Institutional Reforms for an Entrepreneurial Society

Part II: Institutional reforms Strategies for Italy, Germany and the UK

Part II-a An institutional reform strategy for Italy

Part II-b An institutional reform strategy for Germany

Part II-c An institutional reform strategy for the UK

The Policy Briefs for Italy, Germany and the UK were attached to these country reports in Part II. These policy briefs were then presented at:

“Round Table with policy makers on the reform strategy for Germany” that took place on 24 April 2018 at the Ministry of Economic Affairs (BMWi) in Berlin.

“Round Table with policy makers on the reform strategy for Italy” that took place on 5 March 2018 at the Cassa Deposito e Prestiti (CDP) in Rome.

“Round Table with policy makers on the reform strategy for the UK” that took place on 26 April 2018 at the Marshall Institute, London School of Economics in London.

And a report on each of these round tables was added to the respective country reports in Part II. All foreseen parts of deliverable 5.12 have thus been submitted on time.

Upon presenting the FIRES-reform proposals for Germany in Berlin (24 April 2018), the consortium received an invitation to also present the FIRES project and approach to the European SME-envoy network at DG GROW in the fall of 2018. In the executive board meeting of May 2018 it was confirmed that the deliverable, together with work in WP6, will form the basis for two open source books with Springer publishers. We highly recommend the Commission and policy makers interested in the FIRES-output, start with these policy briefs and deliverable, as in it the entire project comes together in a practical application of the FIRES seven-step approach to three specific member states.

Highlight clearly significant results:

- A novel dataset on venture creation processes was created which offers ample opportunities for scholarly research. While data collection was just completed and data cleaning is still in full swing, research collaborations are already pursued with leading scientist in the field.

- A separate deliverable paves the way for the use of sequence analyses in entrepreneurship research as it explains how this method works and how it can be applied to study venture creation processes.
- Sequence analyses of team formation, finance acquisition, and product development processes provide two fundamentally new insights: First, they identify typologies, i.e. those processes that are most frequently pursued and, thus, particularly typical for team formation, finance acquisition, and product development. Second, they illustrate which contextual factors (including national institutions) drive ventures to embark on one rather than another process.
- The case studies completed within WP5 provide evidence on how specific (policy-) initiatives play out in distinct institutional contexts.
- A comprehensive list of policy reform proposals was developed with input from stakeholders and academic partners between the conference in Utrecht in November 2016 and Athens in October of 2017.
- A practical seven step procedure for building a science based reform strategy for any entrepreneurial ecosystem was developed.
- A tailored reform strategy was then proposed for three European member states, Italy, Germany and the UK, selected to represent very different “Varieties of Capitalism” and institutional contexts in the European union.
- These reform strategies were discussed in dedicated policy round tables in Rome, Berlin and London and generally well received. Discussions on the proposed policy interventions led to small adjustments in the proposed strategies that proved fruitful starting points for discussion.

Use of resources (will be delivered later pending final financial reporting):

WP5				
Partner Number	Partner Name	PMs planned	PMs spent	PMs remaining
1,0	UU			
2,0	KUL			
3,0	FSUJ			
4,0	UPRC			
5,0	PTE			
6,0	POLIMI			
7,0	IST			
8,0	IFN			
9,0	LSE			
	Total			

1.2.6 Work package 6

Summary of progress towards objectives specified in Annex I

In order to operationalise the institutional reform strategy developed in the other work packages, we needed to consider how this strategy might be implemented. The objective of this work package was therefore threefold. First, we needed to understand the various dimensions of entrepreneurship

policy, i.e. a policy area at the intersection of several policy domains (financial, economic, labour market, industrial, etc.) and its current grounding in the international and EU legal and institutional framework) relevant to the development of the entrepreneurial society with a specific focus on the division of competences, policy coherence, subsidiarity and multilevel governance. This objective was fulfilled by completing Task 6.1 (see below). Secondly, we had to identify the legal implications of the proposed institutional reform agenda as outlined in other work packages and assess the legal and political limitation constraining its implementation. This was achieved by performing Task 6.2 and Task 6.3 (see below). Finally, we summarized the FIRES approach towards pursuing institutional reform in a policy-brief (Task 6.4)

Details for each task executed

Task 6.1: Entrepreneurship policy: A Multi-dimensional (Coherence) and Multi-level Assessment (Subsidiarity)

The performance of this task resulted in deliverable 6.1 – Entrepreneurship policy: A Multi-dimensional and Multi-level Assessment, which was submitted on 30 November 2016.⁶ By way of this study (a 200 page report), which was geared towards fulfilling the first objective mentioned above, we gave an account of the current state of play of EU policy on the promotion of entrepreneurship, as reflected in the various policy documents and related legislation adopted by EU institutions. Such an overview was necessary, as a preliminary step, in order to identify the key actors and stakeholders that need to be approached and engaged in order to ensure that the proposed FIRES reform agenda is workable and effective, and that the policy recommendations are addressed to the appropriate level of governance.

The work done for the completion of this task took the form of desk research of the major policy documents of the EU detailing the Union current approach to entrepreneurship policy, a number of interviews with key experts and stakeholders, complemented with a literature review of both general issues of horizontal coherence and vertical subsidiarity, and specific issues of entrepreneurship policy.

A first, thorough, round of research identified the main institutions at EU level dealing with entrepreneurship and linked them with existing policy areas and legislative competences. Subsequently, the research moved to the second phase, which consisted of a mapping exercise of the division of competences in the EU on entrepreneurship, both horizontally and vertically.

Considering the complex nature of this task, the desk research was complemented by a number of stakeholder consultations and interviews with officials of the EU. For the horizontal mapping exercise, the WP coordinator, along with the UU partner of the project, engaged in a stakeholder consultation with three representatives of the DG of the European Commission responsible for entrepreneurship and SMEs (DG GROW). The consultation consisted of a presentation of the objectives of the FIRES project, in general, and of WP6 in particular, followed by an interview that was aimed at identifying the most relevant actors and institutions at the EU level for the aims of the project.

Based on the findings resulted from the stakeholder consultation, and the corresponding desk research, we then focused on the regulation and promotion of bottom-up initiatives at the regional (local) level. This focus on EU support for fostering local entrepreneurship has allowed the researchers

⁶ By Phillip de Man, Ward Munters and Axel Marx, with the cooperation of Kolja Raube and Dylan Geraets.

who performed Task 6.1 to combine the horizontal and vertical mapping exercise, by singling out those actors at EU level with close ties to the regions in Europe (DG REGIO, Committee of the Regions, European Regional Development Fund). Subsequently, a number of interviews with officials from these institutions have been carried out, which, in turn, gave further guidance to the desk research for Task 6.1.

Task 6.2: Identification and Assessment of the Legal Implications of the Proposed Reform Agenda

The performance of this task resulted in deliverable 6.2 – Identification and Assessment of the Legal Implications of an Entrepreneurial Reform Agenda,⁷ which was submitted end of November 2017 (a 100 page report). In this study, we analysed the legal implications of the FIRES agenda to reform the EU's entrepreneurship policy, as laid out in FIRES Deliverable 2.1 – Institutional Reform for Enhanced Innovation and Entrepreneurship: An Agenda for Europe.⁸ The aims of this study were threefold: (1) to determine whether the regulatory powers needed for implementing the recommendations made in Deliverable 2.1 lay at the EU level or at the national level of government; (2) to assess whether the recommendations were consistent with existing EU law and policy and whether there are any international conventions that would constrain their implementation; and (3) to determine if the recommendations should be addressed primarily to the EU institutions or primarily to the Member States, or to both levels of government equally.

In completing this task we relied exclusively on desk research and legal analysis. After explaining the division of powers between the EU and its Member States, we analysed each of the recommendations proposed in FIRES deliverable 2.1 – at the time this study was conducted, according to the timeline set in grant agreement, deliverable 2.1 was the only FIRES document containing a reform strategy. More specifically, we answered the following questions with respect to each of the policy recommendations: 1) whether it is the EU institutions or the governments of the Member States who have the requisite competence to implement the recommendation; 2) whether the recommendation is consistent with current EU law and policy, as well as relevant international obligations that the EU or the Member States may have; 3) whether the recommendation has already been implemented by the EU, or is in the process of being implemented; and 4) whether the implementation of the recommendation is of primary concern for the Member States or the EU institutions. This exercise was conducted by examining EU legislation and policy documents relevant to the policy areas and specific recommendations made in deliverable 2.1.

Task 6.3: Assessment of the Political Opportunities and Constraints of the Proposed Reform Agenda

The performance of this task resulted in deliverable 6.3 – Assessment of the Political Opportunities and Constraints of the Proposed Reform Agenda,⁹ which will be submitted by 31 May 2018. The objective of this task was to benchmark the proposed policy reforms with a wide array of stakeholders relevant to pursuing a policy aimed at a more entrepreneurial economy. The aforementioned objective was achieved by bringing together experts, policy makers and stakeholders in the context of several

⁷ By Andrei Suse and Nicolas Hachez, with the cooperation of Axel Marx.

⁸ Niklas Elert, Magnus Henrekson and Mikael Stenkula, An Institutional Framework for Innovation and Entrepreneurship/ Institutional Reform for Enhanced Innovation and Entrepreneurship: An Agenda for Europe, FIRES Deliverable 2.1, January 2017.

⁹ By Axel Marx and Andrei Suse, with the cooperation of Mark Sanders and Michael Wyrwich

rounds of consultations and discussions on the policy proposals. Thus, a number of four entrepreneurship policy round table discussions specifically geared towards debating the reform strategy have been organized with stakeholders in Brussels,¹⁰ Rome,¹¹ Berlin¹² and London.¹³ The round tables started with a presentation of the FIRES policy reform proposals which was followed by discussions and debates on the merits of the proposals. For instance, the participants were asked to gear their interventions towards answering questions such as: ‘do you agree with our approach?’; ‘which proposals would you endorse and which you would disregard?’; or ‘is the implementation of the FIRES proposals politically feasible?’. One last such round table will take place in Brussels on 25 May 2018. In addition to reporting on those discussions, we conducted questionnaires with the participants from the Rome, Berlin and London events in order to identify the most (and least) important proposed reforms. Among other things, we questioned the participants on the political feasibility of implementing the reform package that was presented and discussed at each of those three events. Having submitted the questionnaire to all the participants in the three roundtables, we received in total 19 responses.

Task 6.4: Towards the Entrepreneurial Society: A Coherent Policy Reform Agenda

The performance of this task resulted in deliverable 6.4 – Towards the Entrepreneurial Society: A Coherent Policy Reform Agenda,¹⁴ which will be submitted by 31 May 2018.

The original objective of this task was to consolidate the policy proposals articulated in the other work packages into one policy brief. Given that the country-specific reform strategies are extensive, a decision was made at the consortium level that the consolidated reform strategy be laid out in deliverable 5.12 – Financial and Institutional Reforms for the Entrepreneurial Society: Part I,¹⁵ and that the Policy Brief of 6.4 focus on the FIRES approach towards pursuing policy reforms. Consequently, we decided together with the coordinator, that in the performance of this task we would present the 7-step FIRES method for policy making. We view this as a sound method that policy makers within the EU institutions as well as from the governments of Member States can apply in the process of making policy relevant to entrepreneurship. This FIRES approach cuts across levels of governance and is applicable from regions to states. The resulting policy brief still includes a consolidated list of the 63 policy proposals laid out in [D5.12](#).

Clearly significant results

- We identified the main institutions at EU level dealing with entrepreneurship policy.

¹⁰ This event took place on 28 November 2017 and took the form of a seminar on the reform agenda laid out in FIRES deliverable 2.1 (see n. 3 above). The panel was composed of Professor Magnus Henrekson (FIRES), a European Commission official and two Members of the European Parliament. The presentation of the FIRES proposals was followed by a panel discussion, which was, in turn, followed by a discussion with the audience consisting of more than 60 participants (EU institutions officials, government officials from the EU Member States, entrepreneurs and other business interests, investors, academics, diplomats, lawyers, etc; for more details see deliverable 6.3).

¹¹ The Rome round table took place on 5 March 2018. It was attended by 11 stakeholders (policy makers, bankers, academics and international civil servants) plus four FIRES researchers (for more details see deliverable 6.3).

¹² The Berlin round table took place on 24 April 2018. It was attended by 16 stakeholders (academics, representatives of business interests and bankers) plus several FIRES researchers (for more details see deliverable 6.3).

¹³ The London round table took place on 26 April 2018. It was attended by 22 stakeholders (academics, venture capital investors, entrepreneurs, government officials) plus several FIRES researchers. (for more details see deliverable 6.3).

¹⁴ By Axel Marx, Andrei Suse, Mark Sanders and Andrea Herrmann

¹⁵ By Mark Sanders

- We mapped out the EU's entrepreneurship related legislation and policy initiatives.
- We determined which level of government, whether the EU or the Member States, is best placed for implementing the reform strategy laid out in FIRES [D2.1](#).
- We determined to what extent the reform strategy laid out in FIRES [D2.1](#) is consistent with current EU law and policy, as well as the EU's international obligations.
- We determined whether the policy reforms proposed in FIRES [D2.1](#) have already been implemented or are under implementation by the EU institutions.
- We determined whether each of the policy reforms proposed in FIRES [D2.1](#) should be primarily addressed to the EU institutions or the Member States.
- In the view of the stakeholders consulted, the implementation of the large majority of the FIRES reform proposals for Italy, Germany and the UK is politically feasible. Moreover, we identified those policy proposals the implementation of which may be difficult.
- In the view of the majority of the stakeholders consulted, the implementation of the proposed reforms for Italy, Germany and UK would be considerably useful.
- A clear evidence-based approach towards pursuing policy reforms based on the 7-step approach of FIRES.

Deviations from Annex I

Following the changes in the structure and set up of the reform agenda and country studies presented in [D5.12](#) it made sense to also adjust the contents of especially [D6.4](#) accordingly. The final policy brief was always intended to be an accessible summary of policy relevant results of FIRES. Therefore it was decided to put the method for tailoring institutional reform strategies more central in the brief.

Use of resources (will be delivered later pending final financial reporting):

WP6				
Partner Number	Partner Name	PMs planned	PMs spent	PMs remaining
1	UU			
2	KUL			
3	FSUJ			
4	UPRC			
5	PTE			
6	POLIMI			
7	IST			
8	IFN			
9	LSE			
	Total			

1.2.7 Work package 7

Summary of progress towards objectives specified in Annex 1

The main purpose of work package 7 was to actively disseminate the information about the project and its results among the target audiences through various outreach activities. This WP was

coordinated by Utrecht University but relied also heavily on the input and activities of all consortium partners.

Already in the first reporting period, we have submitted most deliverables planned in this work package, D7.1 Dissemination plan, D7.2 Report on corporate identity, D7.3 Project website, D7.4 Project brochure and flyers, D7.5 Preliminary report on dissemination structure. Resources have been invested into a development of the project house style, website and event online magazine, that served the project throughout its duration.

During the project and in the second reporting period in particular, attention has shifted towards dissemination. As table Annex 2 below shows, over one hundred workshops, conferences, seminars and other events were attended by FIRES-researchers, where research, papers, posters, policy briefs and ideas were discussed and spread. In addition to academic audiences, we engaged with stakeholders and disseminated the project's scientific and policy relevant results in past two years with increasing intensity, culminating in a tour of 9 policy round tables that were organised in as many European cities, to reach out to policy makers throughout Europe.

In the past years, FIRES was also present at several entrepreneurship events, vested interest group events, academic events, and policy and practitioner workshops. With 203 tweets, 70 followers we have been most active on twitter when it comes to social media. The coordinator also posted some Facebook and LinkedIn posts, but there responses and reach proved much less. The FIRES website (<http://www.projectfires.eu/>) has some 70 news items and 7 blog entries and serves as a repository of all FIRES output with reports, manuscripts, policy briefs and summaries of workshops and round tables. Table Annex 2 below provides a full list of dissemination activities in the first reporting period.

Details for each task executed

Task 7.1: Dissemination plan

The main focus of the dissemination strategy is ensuring that the project results are fed into policy-making processes at both national and European level. At the outset of the project, the dissemination plan was prepared and submitted as a deliverable D7.1 to the EC. Towards the end of the project the reform strategies for Italy, Germany and the UK were discussed with high level policy makers at a round table in Rome, Berlin and London respectively, whereas more thematic policy round tables were hosted in Lisbon, Piraeus, Arnhem, Utrecht and finally Brussels. As a follow-up of the project, the FIRES consortium has also been invited to present her approach and results to the EU network of SME-envoys by Mrs. Dr. Hepperle, German SME Envoy and discussions are ongoing with the OECD. Also, around the publication of the two contracted books with Springer Publishers, the consortium members will generate further impact by doing book presentations at relevant venues. Of course, the data collected and networks built over the past 3 years will continue to bear academic fruits well into the future.

Task 7.2: Set up dissemination structure

To enhance the dissemination of information about the project and its objectives, we have designed flyers, brochures, and banners. These served to promote the project at events the consortium partners attended and organized. We already reported on this in RP1.

Task 7.3: Development of corporate identity

This task has been completed and the report was submitted as D7.2. The corporate identity includes an original project logo, the development of a basic layout template for deliverables and external communication, such as power point presentations, policy briefs or newsletters. As a result, all communication within the project had the same, uniform layout, use of logo and colours. In addition, a separate event logo in a consistent style has been developed for the stakeholder engagement events planned in the project. All partners were instructed on how to use the templates and house style elements. Towards the end of the project an animation video to explain the FIRES seven step approach has been made in the same house style and will be used in further disseminating the main results of the project. We already reported on this in RP1.

Task 7.4: Online tools

The main aim of this task was the development of an online infrastructure for dissemination purposes. From the start of the project the coordination team was focusing on developing the project website that would be practical and provide clear information and an overview of the project's progress. This website was presented in a deliverable D7.3 already in month 6 of the project. Of course it has been filled and updated and by now contains a full repository of the project. The website will be kept live for at least 5 more years. The website also offers the full and updated list of all the researchers that participated in the consortium as well as the members of the Advisory board. On the website our final results are presented in an appealing way in the form of a short animation.

Deviations from Annex I

It proved that there was not a lot of people that signed up to the FIRES-newsletter. For that reason it was decided not to continue this channel for dissemination given the excessive amount of time that went into preparing such newsletters. Instead the coordinator ensured the website was frequently updated and signalled news to the FIRES-community and followers through twitter.

Use of resources (will be delivered later pending final financial reporting):

WP7				
Partner Number	Partner Name	PMs planned	PMs spent	PMs remaining
1	UU			
2	KUL			
3	FSUJ			
4	UPRC			
5	PTE			
6	POLIMI			
7	IST			
8	IFN			
9	LSE			
	Total			

1.3 Impact

In short, the impacts foreseen in section 2.1 of the DoA have largely been achieved. The FIRES-project has already had an impact on the scientific, policy and societal level and this impact is only likely to increase as times passes and the full relevance of our work sinks in. The impact of the FIRES-project will only be visible after some time, but already one book and 16 publications in peer reviewed journals are being cited, whereas another 24 journal articles are under submission and two more impactful books are to be published. Already during the past three years, the project has been very successful in reaching out. Our dissemination activities spanned a wide range of events and stakeholder groups (see Annex 2). And everywhere we presented our approach and philosophy the project encountered resonance and support. The FIRES project combines good science, sensible proposals and effectively mobilising support and has been successful in doing so in the past three years.

The full impact of our project, however, has not yet been revealed after just three years and probably not after another three have passed. It takes a lot of time for society to get acquainted and familiar with and supportive of such complex ideas as the Entrepreneurial Society. We strongly believe the superficial and obvious policy interventions that have been tried to date will not be enough. We consider our project quite successful if it is able to put the issue of fundamental institutional reform higher on the European policy agenda and provides some first proposals that make policy makers stop and reconsider. The project today has done that and more. We have developed a simple but effective seven step procedure that will help policy makers at every level in the EU to tailor reform strategies to their respective constituencies and coordinate such interventions across policy making levels. The current trends towards more vulnerable financial monocultures, paternalistic or even protectionist labour market regulations, and the further commodification of knowledge are not the direction the FIRES-consortium advocates. But the change in trend and direction that FIRES proposes in the end may have its biggest impacts only decades from now.

Our project's main impact is to provide a sound scientific base for entrepreneurship, innovation and growth policies in Europe for decades to come. We have only started imagining such policies. FIRES-researchers have impacted the scientific knowledge base by identifying the relevant institutional system boundaries and foundations, establishing the urgency of a transition and proposing data based tools to systematically assess and compare entrepreneurial ecosystem functions as well as founding processes across institutional complexes. Also important is that this project has helped finance the research for Ph.D.-s Taking the inevitable multi-level policy approach to the question how to improve the entrepreneurial ecosystem in a region helps identify and target the right policy levels for maximising the impact of future work. The strong link that FIRES-researchers have forged with trade, competitive advantage and inclusive employment at the regional level is another clear contribution that sets our project apart and puts the work we do at the scientific frontier.

Impacts reported and foreseen by partners

The table below gives an overview of the direct scientific impact the FIRES-project has already had at the partner institutions involved.

Table 4: Academic Impacts per Partner

Partner	Publications	Submitted to Journal or Publisher	Working Papers	PhDs and PostDocs
UU-USE	3	1	2	2
UU-HUM	1	2	1	1
UU-GEO	1	2	1	1
LSE	2	1	2	0
POL	1	2	1	3
PTE	3	2	1	5
UPRC	1	1	0	2
IST	0	4	0	1
IFN	3	1	1	3
FSUJ	1	6	4	4
KUL	1	4	1	8

On impact the team leaders at the various partner institutions have commented the following: *“Numbers and figures do not capture the full impact and probably under-estimate the long run effects. This is for two reasons, one direct and the other indirect. The former has to deal with the fact that FIRES contributed to the formation of (primary data) infrastructures that will continue to produce research much beyond the temporal limits of the project. The latter has to deal with the fact that FIRES contributed to the formation of a network of researchers who will likely collaborate in the future (so producing further research) and this network is envisaged to represent an important academic reference point for the EU in the years to come on the subject of entrepreneurship and institutions.”*

“In part because of the FIRES-work, LSE is now creating an Entrepreneurship Centre devoted to assisting students and faculty in career choice of becoming an entrepreneur and seeking to commercialise business innovations and ideas.”

“In the course of the FIRES work we obtained access to confidential administrative data from the Belgian Social Security Agency and Firm Register. This information will be used in subsequent research by recently attracted PhD students and produce further policy relevant research output.”

“The FIRES project may have a relatively great future impact at the Faculty of Business and Economics University of Pécs, as this project counted to the major international projects. The involved researchers have had the opportunity to participate and do their investigations in a common project together with international well-known experts and professors in the field of entrepreneurship. The results of the project represent that the PTE team has created a unique tools to measure entrepreneurship itself on national as well as regional levels and to estimate its impact on regional economic growth. The further refinement of these instruments may serve as a determining part of the research strategy of the Faculty.”

“The project supported the progress of early career scholars as well, since a couple of post-doc researchers and a PhD student has also been involved to the research processes of the project. As side-effect of the project, a couple of widely known researchers have delivered public lectures about their most recent results at our Faculty. This project has strengthened our professional relationship with colleagues from the project and we trust that it will lead to further common research projects in the future.”

“A coherent and systematic approach in measuring and assessing the quality of entrepreneurship in Europe and evaluating the role of institutions - mainly those of labor, knowledge and finance - in fostering entrepreneurship.”

“The project pursues a multilevel (country, regional) and multidisciplinary - historical and qualitative - research, developing new datasets, indices, methodologies and networks to carefully address the diversity and evolution of institutional and entrepreneurship landscapes in Europe.”

“FIRES offers novel insights and careful policy implications through the close cooperation of academicians and stakeholders from all over Europe creating eventually a knowledge repository useful for future research endeavors.”

We have discussed the academic impacts of FIRES in a panel at the closing conference in Brussels on May 25th 2018. The write-up of that panel is part of deliverable [D6.4](#). The FIRES project has delivered new data and the research that was done has contributed new insights to the field of entrepreneurship, but also beyond. By involving and collaborating with historians, geographers and legal scholars, the FIRES project was also a living lab in multidisciplinary research. Especially in that area, we believe the project has successfully shown that for policy relevant scientific research such multidisciplinary approaches are valuable and essential. However, projects will always need to balance this need for working between and across disciplines with the equally important requirement that research and results needs to be publishable and contribute to sometimes less multidisciplinary journals. The FIRES-project has proven that such a balancing act can be done successfully if the consortium leadership and participants are respectful and appreciative of each other's strengths, while being forgiving and understanding for each other's weaknesses. The core topic of FIRES, entrepreneurship, lends itself very well to a multidisciplinary approach, given that this field itself is already very empirically and practically oriented. A lesson we can draw from the FIRES-project on how to organize effective multidisciplinary research is that it works if one brings a group of individually disciplined scientists together around a common, real world question. The value added of then taking multidisciplinary approaches reveals itself and that value becomes obvious to all. But at the same time, the scientific work clearly conforms with the norms and standards of the scientific communities and journals the respective collaborators find themselves in professionally. These insights and lessons have impact far beyond the originally intended impacts of the FIRES project.

Update of the data management plan (if applicable)

Data has been collected and provisions have been made for a durable and responsible data repository for all FIRES databases ([D3.1](#), [D4.2](#) and [D5.1](#)). These databases will be available for the public as soon as possible as stipulated in the data management plan.

Follow-up of recommendations and comments from previous review(s) (if applicable)

All recommendations and requests for updates received from the previous reviews have been implemented. These were generic and no specific recommendations are this detailed in this section,.

Deviations from Annex 1 (if applicable)

The scientific work in the project was planned with sufficient flexibility and although one scientific deliverable was submitted late, the work in the other work packages and tasks are not affected by such

unanticipated delays. All other slight deviations have been described and justified, in detail in the Work package sections above.

Stakeholder engagement strategy and FIRES events

Based on the experience gained in the first year of the project, especially with the organization of the Kick-off meeting, we already adjusted our stakeholder engagement strategy and we decided to switch from larger, public events with open invitations to more targeted and smaller events that give the opportunity to have a high quality, intense discussion. For the remaining consortium meetings, it was decided to follow that format and ambition level. Beginning in Utrecht, in October of 2016, we limited our stakeholder group to some 50 invited guests. For the event in Greece in 2017, the original plan was to combine the 2nd Consortium meeting with an open scientific conference. Given the arguments above, we decided to only meet with the consortium in Greece and use that time to really craft our reports and deliverables into high-quality journal manuscripts. It also turned out that the Greece meeting was instrumental in finalising the longlist of policy interventions that is now reported in [D5.12](#), Part I. Instead of the open academic conference in Greece, we did engage with other academics and colleagues in special invited tracks at other conferences and events. The final FIRES event, the policy workshop in Brussels in 2018, has been widely advertised in the European policy circles but also targeted at a limited group of high-impact policy makers, switching from quantity to quality. To still also reach local and national policy makers, it was decided to not host all foreseen policy round tables at the final event in Brussels, but rather, organise these events in the spring of 2018 in the various partner countries. Most project beneficiaries have visited conferences, workshops, seminars and events where the FIRES-stakeholders could be found. There we engaged with them, both through formal contributions to the program and through informal exchanges. The budget implications and changes related to this strategy shift have been dealt with within the total budget constraints by reallocating budget for travel. In accordance with this reorientation in the stakeholder engagement strategy, the FIRES-project will be hosting a dedicated track in three large international academic conferences, on multidisciplinary entrepreneurship research (IECER 2016, IECER2017) and on institutions and innovation (WINIR 2017) in Chur, Switzerland, Siegen, Germany and Utrecht, the Netherlands, respectively.

The final group of stakeholders, the policy makers themselves, are also hard to reach. We advertised our final event far and wide in European policy circles, but it proved hard to attract a big audience in the midst of the European Semester. European policy makers and researchers are all very much absorbed in their own projects and programs and the agenda for events in Brussels is overfull. We believe DG Research should more actively use its convening power to help project reach the target audiences, as it is very frustrating to work hard for 3 years, only to see very minimal interest in the results. We will of course continue to disseminate our results whenever opportunities arise and we will actively go after such opportunities. But we believe the Commission should do more to ensure the work being done in answering calls the Commission itself has issued, end up in the right place. One could think of a joint concluding conference of all projects funded under a given call in which the directorate(s) that formulated the call are simply forced to attend as a condition for being allowed to formulate a call. If you ask for research with tax payers money, it is a matter of common decency to show up when the research is being delivered. This cannot be left to the project officer at DG Research, but should be a responsibility of the DG that formulated the research question in the first place. That DG should also feel a responsibility towards making the results of the research known to relevant policy

makers. Just sending around an invitation to potentially interested policy makers that can easily ignore the invitation when agendas are full, results in disappointing turnout. If it is clear that the people issuing the call for proposals are all present at the concluding conference that is in their agenda's three years in advance, saves the researchers frustration and the Commission embarrassment. The Commission should realise it is not the core business of researchers at academic institutions to program and organise appealing policy maker events. They might assist the projects they commission in that area. We are convinced that would boost motivation and could save on project costs by realising economies of scale and scope in the concluding conferences, also for the policy makers involved.

1.4 Tasks and Milestones

Task transfers in WP4

During the first reporting period, the only significant shifting of tasks and resources between partners was made. We reported in detail about this shift in RP1.

The tasks that were originally planned for LSE in WP4 were divided between University of Pecs (PTE) and Utrecht University (UU). In terms of time effort, the total of 18 PMs was redistributed from LSE to PTE (16 PMs) and UU (2 PMs). PTE hired an extra team member to execute these tasks. At UU the tasks have been distributed among the current team. Professor Acs was added to the [advisory board](#) to remain at disposal for any necessary consultancy. He contributed to various deliverables and attended the annual project meetings in Utrecht and Athens.

The responsibility in relation to the Deliverables planned in WP4, was redistributed as follows:

Table 5: Updated Responsibilities WP4

Deliverable Number	Deliverable Title	Lead beneficiary old	New Lead (updated)
D4.1	A review paper on the extension of the GEDI-indicator with additional indicators on financial, labour and knowledge institutions	LSE	UU
D4.2	Pan European database with time series of new GEDI-indicators	LSE	PTE
D4.3	Time series and panel data analysis of GEDI and growth performance indicators	UU	UU
D4.4	Pan European database with new REDI-indicators	PTE	PTE
D4.5	Cross-sectional analysis of REDI and regional growth performance measures	UU	UU/PTE
D4.6	GMR model for Europe linking Entrepreneurship, Institutions and Growth	LSE	PTE

Delays in achieving milestones

In the first reporting period, we have experienced some delay in achieving 2 milestones that was reported in RP1. In RP2 several milestones encountered delays, but all were delivered and the delays could be accommodated in the rest of the work. The delay in data collection and analysis in WP5, however, did imply that the country reports and reform strategy for Italy, Germany and the UK could not benefit from the full and complete results of the sequence analyses as these could not responsibly be delivered on time. The delays in data collection were due to organisational issues and problems in setting up the data collection process in Italy. This was known and communicated well in advance and handled as well as can be expected, but had some unforeseen trickle down effects. The team responsible for MS6 did succeed to deliver preliminary results on some of the data collected for use in the country reports and policy briefs. The overview of milestones is in the table below.

Table 6: Milestones

Milestone number	Milestone title	WP number	Due Date (in months)	Status
MS1	Kick-off Meeting	WP1	3	Achieved in Month 4
MS2	An institutional framework for innovation and entrepreneurship	WP2	12	Achieved in month 18
MS3	Pan European database with new indicators of related variety at national and regional (NUTS2) level; related variety indicators based on sectors, products and tasks	WP3	12	Achieved
MS4	Pan European database with time series of new GEDI-indicators	WP4	12	Achieved in month 14
MS5	Pan European database with new REDI-indicators	WP4	18	Achieved
MS6	Internationally comparative dataset on startup processes and their institutional foundations in Germany, Italy, the UK and the US; Sequence analyses that reveal country-specific typologies of startup processes and their institutional foundations	WP5	24	Achieved in month 36
MS7	An institutional reform strategy for Germany, for Italy, and for the UK	WP5	32	Achieved in month 34
MS8	Entrepreneurship Policy: a multidimensional and multi-level assessment	WP6	12	Achieved
MS9	Identification and assessment of the legal implications of an entrepreneurial reform agenda	WP6	24	Achieved in month 36

1.5 Use of resources

A full reporting on the use of resources will be provided after the financial statements and reporting of the partners have been collected, approved and audited.

2. Conclusions

In this report we have provided a rather technical overview of the FIRES-report. In general it can be concluded that the project has been managed well and all foreseen deliverables and reports have been delivered in time and within budget. Some minor amendments and alterations to the original Grant Agreement were necessary, but could be implemented without problems. This, however, is only the technical conclusion of the technical report on the project. Much more interesting and relevant is perhaps the content. We set out to answer the question how to restore inclusive, innovative and sustainable growth to Europe. And after three years of hard work, we have to conclude that that question begs a rather nuanced and differentiated answer. There is not a single golden bullet, button or policy lever to pull such that the desired outcome magically appears. We have established in our Work Package 2 that institutions play a key role, have long and deep historical roots and show incredible and relevant diversity across Europe. One size fits no-one and reforms must be tailored to the country or region under consideration. Work Package 3 has established firmly that such a transition, however, is both urgently needed and socially desirable. Entrepreneurial venturing was shown to help adapt to global competition and promote smart specialisation and is required for Europe to assert its position in global value chains and maintain employment levels. It is also desirable as it is shown to promote well-being, engage more marginal groups in society and (creative) entrepreneurs engage in more social behaviour and arguable take social corporate responsibility. In Work Package 4 the project developed the quantitative tools to assess the quality, identify the bottlenecks and predict the macroeconomic outcomes of policy interventions and reforms strategies in general. These tools are one-size-fit-all, but fit for purpose in that they can assess a wide variety of factors in a wide variety of regions in a consistent and coherent way. Work Package 5 then collected new data and the essential qualitative information using surveys among founders in Italy, Germany and the UK. Moreover, in this Work Package a series of case studies in different institutional environments supported the intuition that reform strategies must always be carefully tailored and in D5.12 a method for doing so was developed and described. This approach involved developing a long list of (64) proposals aimed to increase the flows of labour, knowledge and finance to entrepreneurial experimentation across Europe, based on stakeholder consultations, brainstorming and extensive literature research, presented in Deliverables 2.1 and 5.12. For practical reasons the data collection effort in Work Package 5 was restricted to three countries and for these countries the FIRES-seven step approach in creating a tailor made reform strategy could therefore be illustrated in three country studies and policy briefs (uploaded as part of D5.12) that were also presented in the respective capitals of these member states in high-level policy round tables. Work Package 6 then delivered elaborate and extensive mappings of the entrepreneurship policy making field in the European Union, mapped the proposals developed in Part I of D5.12 onto the competencies of policy levels in Europe and finally reported extensively on the results of the policy round tables and political, legal and practical feasibility of most of the FIRES reform proposals. Policy makers across Europe were generally positive about the comprehensive approach the FIRES project has developed and further invitations to present parts of our work resulted. The FIRES-project is formally over, but we have clearly only begun to rekindle the flames under Europe's Entrepreneurial Society.

Annex 1 Deliverables in Detail

Deliverable	Due date	Uploaded in ECAS in M
1.1 Quality Assurance Plan	3	18/09/15
Quality Assurance Plan	3	
Project Manager	3	
Sanders	3	
1.2 Kick-Off Meeting Berlin	3	07/10/15
Kick-Off Meeting Berlin	3	
Project Manager	3	
Sanders	3	
1.3 1st Consortium Meeting Utrecht	18	22/11/16
1st Consortium Meeting Utrecht	18	
Project Manager	18	
Sanders	18	
1.4 2nd Consortium Meeting Hydra	27	24/11/17
2nd Consortium Meeting Hydra	27	
Project Manager	27	
Sanders	27	
1.5 Midterm Report 1	12	25/07/16
Midterm Report: A report on the progress of the work towards the objectives of the project, including the achievement of any milestones and deliverables identified in Annex 1 and overview of use of resources and expenses.	12	
Project Manager	12	
Sanders	12	
1.6 Midterm Report 2	36	18/10/17
Midterm Report: A report on the progress of the work towards the objectives of the project, including the achievement of any milestones and deliverables identified in Annex 1 and overview of use of resources and expenses.	36	

<i>Project Manager</i>	36	
<i>Sanders</i>	36	
1.7 Final Report	36	31/05/18
Final Report: A report on the progress of the work towards the objectives of the project, including the achievement of any milestones and deliverables identified in Annex 1 and overview of use of resources and expenses.	36	
<i>Project Manager</i>	36	
<i>Sanders</i>	36	
1.8 Final Consortium Meeting Brussels	36	30/05/18
Final Consortium Meeting Brussels	36	
<i>Project Manager</i>	36	
<i>Sanders</i>	36	
1.9 Data Management Plan	6	30/11/15
Data Management Plan	6	
<i>Project Manager</i>	6	
<i>Sanders</i>	6	
2.1 An institutional framework for innovation and entrepreneurship	18	26/01/17
An institutional framework for innovation and entrepreneurship	12	
<i>IFN PhD1</i>	12	
Consultation workshop for stakeholders on topics outlined in tasks 2.1	3	
<i>Henrekson</i>	3	
Manuscript submitted to peer reviewed journal based on D2.6	18	
<i>IFN PhD1</i>	18	
Policy Brief on studies outlined in tasks 2.1	13	
<i>Henrekson</i>	13	
2.2 The institutional evolution of finance in Europe and entrepreneurship	36	Will be 06/08/18
Consultation workshop for stakeholders on topics outlined in tasks 2.2-4	3	
<i>Westerhuis</i>	3	
Manuscript submitted to peer reviewed journal based on D2.17	30	

<i>Dilli</i>	30	
Policy Brief on studies outlined in tasks 2.2	24	
<i>Westerhuis</i>	24	
Round table on the implications of deep institutions for an effective reform strategy	36	
<i>Westerhuis</i>	36	
The institutional evolution of finance in Europe and entrepreneurship	24	
<i>Dilli</i>	24	
2.3 Venture capital in Europe	30	27/11/17
Consultation workshop for stakeholders on topics outlined in tasks 2.2-4	3	
<i>Grilli</i>	3	
Manuscript submitted to peer reviewed journal based on D2.12	30	
<i>POL PD1</i>	30	
Policy Brief on studies outlined in tasks 2.2	24	
<i>Grilli</i>	24	
Venture capital in Europe	18	
<i>Grilli</i>	18	
<i>POL PD1</i>	18	
2.4 The institutional evolution of knowledge creation in Europe and entrepreneurship	22	30/08/17
Manuscript submitted to peer reviewed journal based on D2.10	22	
<i>UU PD1</i>	22	
Policy Brief on studies outlined in tasks 2.3	18	
<i>Economidou</i>	18	
<i>Westerhuis</i>	18	
The institutional evolution of knowledge creation in Europe and entrepreneurship	16	
<i>UU PD1</i>	16	
2.5 The institutional evolution of labour market institutions in Europe and entrepreneurship	14	28/07/16
Manuscript submitted to peer reviewed journal based on D2.4	14	
<i>UU PD1</i>	14	
Policy Brief on studies outlined in tasks 2.4	9	

<i>Henrekson</i>	9	
<i>Westerhuis</i>	9	
The institutional evolution of labour market institutions in Europe and entrepreneurship	8	
<i>UU PD1</i>	8	
2.6 Superentrepreneurship in Asia, Europe and the US	18	30/11/16
Manuscript submitted to peer reviewed journal based on D2.7	18	
<i>IFN PhD2</i>	18	
Superentrepreneurship in Asia, Europe and the US	12	
<i>Henrekson</i>	12	
<i>IFN PhD2</i>	12	
2.7 Megatrends and the transition from a managed to an entrepreneurial economy in Europe	24	30/05/17
Consultation workshop for stakeholders on topics outlined in tasks 2.5	3	
<i>Stam</i>	3	
Manuscript submitted to peer reviewed journal based on D2.15	24	
<i>Henrekson</i>	24	
<i>KUL PD1</i>	24	
Megatrends and the transition from a managed to an entrepreneurial economy in Europe	18	
<i>KUL PD1</i>	18	
<i>KUL RA1</i>	18	
Policy Brief on studies outlined in tasks 2.5	24	
<i>Fritsch</i>	24	
<i>Marx</i>	24	
3.1 A review paper from task 3.1 on indicators and growth effects of related variety at the national and regional level in the EU	9	29/02/16
A review paper from task 3.1 on indicators and growth effects of related variety at the national and regional level in the EU	9	
<i>Economidou</i>	9	
<i>Frenken</i>	9	
<i>Jordaan</i>	9	
<i>Content</i>	9	

3.10 Entrepreneurship and innovation - Report based on the study outlined in task 3.10 2	36	16/03/18
Manuscript submitted to peer reviewed journal based on D3.18	30	
<i>Karamanis</i>	30	
Policy Brief on studies outlined in tasks 3.10	24	
<i>Economidou</i>	24	
Round Table on entrepreneurship and innovation in Europe	36	
<i>Economidou</i>	36	
Entrepreneurship and innovation - Report based on the study outlined in task 3.10 2	24	
<i>Karamanis</i>	24	
3.2 Pan European database with new indicators of related variety at national and regional (NUTS2) level; related variety indicators based on sectors, products and	12	01/06/16
Pan European database with new indicators of related variety at national and regional (NUTS2) level; related variety indicators based on sectors, products and	12	
<i>Economidou</i>	12	
<i>Frenken</i>	12	
<i>Jordaan</i>	12	
<i>Content</i>	12	
3.3 Empirical analysis of drivers of related variety at national and regional level in EU- Report based on the study outlined in task 3.3	36	18/05/18
Consultation workshop for stakeholders on topics outlined in tasks 3.3-5	3	
<i>Fritsch</i>	3	
Manuscript submitted to peer reviewed journal based on D3.7	24	
<i>Content</i>	24	
Policy Brief on studies outlined in tasks 3.3-5	24	
<i>Fritsch</i>	24	
<i>Jordaan</i>	24	
Round Table on the need for the transition to a more entrepreneurial economy	36	
<i>Fritsch</i>	36	

Empirical analysis of drivers of related variety at national and regional level in EU- Report based on the study outlined in task 3.3	20	
<i>Content</i>	20	
3.4 Empirical analysis of the effects of related variety at national and regional level in EU	34	06/03/18
Manuscript submitted to peer reviewed journal based on D3.21	34	
<i>Content</i>	34	
Empirical analysis of the effects of related variety at national and regional level in EU	30	
<i>Economidou</i>	30	
<i>Frenken</i>	30	
<i>Jordaan</i>	30	
<i>Content</i>	30	
3.5 Patterns in global trade and EU labour markets	18	29/03/17
Consultation workshop for stakeholders on topics outlined in tasks 3.6, 3.8 and 3.9	3	
<i>Biesenbroek</i>	3	
Manuscript submitted to peer reviewed journal based on D3.6	18	
<i>KUL PhD2</i>	18	
Patterns in global trade and EU labour markets	12	
<i>KUL PhD2</i>	12	
3.6 New job creation and entrepreneurship	36	22/05/18
Manuscript submitted to peer reviewed journal based on D3.9	24	
<i>KUL PhD2</i>	24	
Policy Brief on studies outlined in tasks 3.6, 3.8-9	24	
<i>Biesenbroek</i>	24	
Round Table on entrepreneurship and inclusive growth in Europe	36	
<i>Amaral</i>	36	
New job creation and entrepreneurship	18	
<i>KUL PhD2</i>	18	
3.7 Social and corporate responsibility and governance in young SMEs	26	28/07/17
Consultation workshop for stakeholders on topics outlined in tasks 3.7	3	

<i>Sanders</i>	3	
Manuscript submitted to peer reviewed journal based on D3.14	26	
<i>Lauritzen</i>	26	
Policy Brief on studies outlined in tasks 3.7	24	
<i>Schenk</i>	24	
Social and corporate responsibility and governance in young SMEs	24	
<i>Lauritzen</i>	24	
3.8 Entrepreneurship and inclusive growth in EU	30	30/11/17
Manuscript submitted to peer reviewed journal based on D3.16	30	
<i>Amaral</i>	30	
Entrepreneurship and inclusive growth in EU	24	
<i>IST PD1</i>	24	
3.9 Institutions, entrepreneurship and wellbeing	36	14/05/18
Manuscript submitted to peer reviewed journal based on D3.17	30	
<i>Sorgner/Wyrwich</i>	30	
Round Table on entrepreneurship and sustainable growth in Europe	36	
<i>Fritsch</i>	36	
Institutions, entrepreneurship and wellbeing	24	
<i>Sorgner/Wyrwich</i>	24	
4.1 A review paper on the extension of the GEDI-indicator with additional indicators on financial, labour and knowledge institutions	9	20/12/16
Consultation workshop for stakeholders on topics outlined in tasks 4.1-2	3	
<i>Acs</i>	3	
A review paper on the extension of the GEDI-indicator with additional indicators on financial, labour and knowledge institutions	9	
<i>Szerb</i>	9	
4.2 Pan European database with time series of new GEDI-indicators	36	TBD
Manuscript submitted to peer reviewed journal based on D4.6	18	
<i>Szerb</i>	18	

Pan European database with time series of new GEDI-indicators	12	
<i>Balasz</i>	12	
Policy Brief on time trends in GEDI outlined in tasks 4.1-2	18	
<i>Szerb</i>	18	
Practitioners Workshop on using GEDI/REDI to improve Europe's entrepreneurial ecosystems	36	
<i>Sanders/Stam/Szerb</i>	36	
Report describing and presenting database in D4.5	12	
<i>Szerb</i>	12	
4.3 Time series and panel data analysis of GEDI and growth performance indicators	24	28/07/17
Consultation workshop for stakeholders on topics outlined in tasks 4.3-4	3	
<i>Sanders/Stam</i>	3	
Manuscript submitted to peer reviewed journal based on D4.9	24	
<i>Stam/Bosma</i>	24	
<i>UU PhD1</i>	24	
Time series and panel data analysis of GEDI and growth performance indicators	18	
<i>UU PhD1</i>	18	
4.4 Pan European database with new REDI-indicators	24	25/07/17
Manuscript submitted to peer reviewed journal based on D4.11	24	
<i>Acs/Szerb</i>	24	
Pan European database with new REDI-indicators	18	
<i>Szerb</i>	18	
Policy Brief on REDI studies outlined in tasks 4.3-4	24	
<i>Szerb</i>	24	
<i>Balasz</i>	24	
Report describing and presenting database in D4.10	18	
<i>Szerb</i>	18	
4.5 Cross-sectional analysis of REDI and regional growth performance measures	30	30/11/17
Manuscript submitted to peer reviewed journal based on D4.15	30	
<i>Szerb</i>	30	

Cross-sectional analysis of REDI and regional growth performance measures	24	
<i>Stam/Sanders</i>	24	
4.6 GMR model for Europe linking Entrepreneurship, Institutions and Growth	36	31/05/18
Consultation workshop for stakeholders on topics outlined in tasks 4.5	3	
<i>Varga</i>	3	
Manuscript submitted to peer reviewed journal based on D4.17	36	
<i>Varga</i>	36	
<i>Szerb</i>	36	
Policy Brief on GMR-model simulations outlined in tasks 4.5	36	
<i>Varga/Szerb</i>	36	
GMR model for Europe linking Entrepreneurship, Institutions and Growth	30	
<i>Varge/Szerb</i>	30	
5.1 Internationally comparative dataset on start-up processes and their institutional foundations in Germany, Italy, the UK and the US	36	TBD
Internationally comparative dataset on start-up processes and their institutional foundations in Germany, Italy, the UK and the US	12	
<i>Herrmann</i>	12	
<i>Held</i>	12	
Manuscript submitted to peer reviewed journal based on D5.7 focusing on finance	36	
<i>Grilli</i>	26	
<i>Held</i>	36	
Manuscript submitted to peer reviewed journal based on D5.7 focusing on knowledge	36	
<i>Held</i>	36	
Manuscript submitted to peer reviewed journal based on D5.7 focusing on labour	36	
<i>Held</i>	36	
Sequence analyses that reveal country-specific typologies of start-up processes and their institutional foundations	24	
<i>Held</i>	24	
5.10 Case Study on Belgian firms' export performance	24	23/09/17
Case Study on Belgian firms' export performance	24	

<i>KUL RA1</i>	24	
<i>Marx</i>	24	
5.11 Case Study on Elderly Entrepreneurship in Portugal	30	30/11/17
Case Study on Elderly Entrepreneurship in Portugal	30	
<i>Amaral</i>	30	
<i>IST RA1</i>	30	
5.12 An institutional reform strategy for Germany. Italy and UK	36	18/05/18
An institutional reform strategy for Germany	32	
<i>Sanders/Fritsch</i>	32	
<i>UU RA</i>	32	
An institutional reform strategy for Italy	32	
<i>Sanders/Grilli</i>	32	
<i>UU RA</i>	32	
An institutional reform strategy for the UK	32	
<i>Sanders/Estrin</i>	32	
<i>UU RA</i>	32	
Policy Brief on the reform strategy for Germany	34	
<i>Sanders/Fritsch</i>	34	
Policy Brief on the reform strategy for Italy	34	
<i>Sanders/Grilli</i>	34	
Policy Brief on the reform strategy for the UK	34	
<i>Sanders/Estrin</i>	34	
Round Table with policy makers on the reform strategy for Germany	36	
<i>Herrmann/Fritsch/Sanders</i>	36	
Round Table with policy makers on the reform strategy for Italy	36	
<i>Grilli/Stam/Sanders</i>	36	
Round Table with policy makers on the reform strategy for the UK	36	
<i>Estrin/Sanders</i>	36	
5.2 Case Study on London's Crowd Funding	12	31/05/16

Case Study on London's Crowd Funding	12	
<i>Estrin</i>	12	
<i>LSE RA2</i>	12	
5.3 Case Study on Dutch Solo-Self Employment	12	31/05/16
Case Study on Dutch Solo-Self Employment	12	
<i>Liebregts</i>	12	
<i>UU RA1</i>	12	
5.4 Case Study on Swedish Intrapreneurship	18	31/01/17
Case Study on Swedish Intrapreneurship	18	
<i>Stam</i>	18	
<i>Stenkula</i>	18	
5.5 Case Study on German Active Labour Market Policy	18	08/12/16
Case Study on German Active Labour Market Policy	18	
<i>Fritsch</i>	18	
<i>FSUJ RA1</i>	18	
5.6 Case Study on Italy's Young Innovative Companies Program	24	22/05/17
Case Study on Italy's Young Innovative Companies Program	24	
<i>Grilli</i>	24	
<i>POL PD1</i>	24	
5.7 Case Study on Greek Philanthropy	18	28/11/16
Case Study on Greek Philanthropy	18	
<i>Economidou</i>	18	
<i>UPI RA1</i>	18	
5.8 Case Study on the Hungarian new tech entrepreneurial ecosystem	30	30/01/18
Case Study on the Hungarian new tech entrepreneurial ecosystem	30	
<i>Szerb</i>	30	
5.9 Case Study on Stock Option Taxation and Entrepreneurship in Europe	24	01/05/17
Case Study on Stock Option Taxation and Entrepreneurship in Europe	24	

<i>Henrekson</i>	24	
<i>IFN RA1</i>	24	
6.1 Entrepreneurship Policy: a multi-dimensional and multi-level assessment	18	30/11/16
Consultation workshop for stakeholders on topics outlined in tasks 6.1-3	3	
<i>Marx</i>	3	
<i>Sanders</i>	3	
Entrepreneurship Policy: a multi-dimensional and multi-level assessment	12	
<i>KUL PhD1</i>	12	
Manuscript submitted to a journal or magazine based on D6.2	18	
<i>KUL PhD1</i>	18	
6.2 Identification and assessment of the legal implications of an entrepreneurial reform agenda	30	27/11/17
Identification and assessment of the legal implications of an entrepreneurial reform agenda	24	
<i>KUL PhD1</i>	24	
<i>Marx</i>	24	
Manuscript submitted to a journal or magazine based on D6.4	30	
<i>KUL PhD1</i>	30	
6.3 Report: Assessment of the political possibilities and constraints of the proposed reform agenda in D5.12	36	TBD
Manuscript submitted to a journal or magazine based on D6.6	36	
<i>KUL PhD1</i>	36	
Report: Assessment of the political possibilities and constraints of the proposed reform agenda in D5.12	30	
<i>KUL PhD1</i>	30	
6.4 Policy Brief: Towards the Entrepreneurial Society: A Coherent Policy Reform Agenda	36	TBD
Policy Brief: Towards the Entrepreneurial Society: A Coherent Policy Reform Agenda	32	
<i>Marx</i>	32	
Round Table with EU policy makers on the reform strategy	36	
<i>Marx</i>	36	
7.1 Dissemination Plan	3	18/09/15
Dissemination Plan	3	

<i>Project Manager</i>	3	
7.2 Corporate Identity including logo, basic lay-out templates	3	21/09/15
Corporate Identity including logo, basic lay-out templates	3	
<i>Project Manager</i>	3	
7.3 Website	6	30/11/15
Website	6	
<i>Project Manager</i>	6	
7.4 Project brochure and flyers	6	30/11/15
Project brochure and flyers	6	
<i>Project Manager</i>	6	
7.5 Preliminary report on dissemination structure	9	29/02/16
Preliminary report on dissemination structure	9	
<i>Project Manager</i>	9	
7.6 Academic Conference Hydra	27	24/11/17
Academic Conference Hydra	27	
<i>Economidou</i>	27	
<i>Sanders</i>	27	
7.7 Policy Workshop Brussels	36	30/05/18
Policy Workshop Brussels	36	
<i>Marx</i>	36	
<i>Sanders</i>	36	
7.8 Kick-Off Meeting Berlin	3	07/10/15
Kick-Off Meeting Berlin	3	
<i>Sanders</i>	3	

Annex 2 Dissemination Activities

This list is not in chronological order, but listed by partner.

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Workshop Host	Stakeholder Consultation Workshop	A review paper on the extension of the GEDI-indicator with additional indicators on financial, labour and knowledge institutions	Mark Sanders & Erik Stam	28th January 2016	http://www.projectfires.eu/news/fires-stakeholder-consultation-workshop/	FIRES organised workshop
Workshop Host	Stakeholder Consultation Workshop	The Future of Small Business Economics Workshop Report	Mark Sanders & Erik Stam	February 2017	http://www.projectfires.eu/wp-content/uploads/2017/02/Feb-17-Workshop-report-The-Future-of-Small-Business-Economics.pdf	FIRES organised workshop
Workshop Host	Stakeholder Consultation Workshop	Building the FIRES Reform Strategy Workshop Report	Mark Sanders	September 2017	http://www.projectfires.eu/wp-content/uploads/2017/09/WINIR-Workshop-Report.pdf	FIRES organised workshop

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
FIRES stand	Hamburg ECFI2 / Flware	We talked to visitors at our stand, ran an experiment in a mobile lab (in collaboration with Humboldt University zu Berlin) and invited participants to fill out our survey on matching investors and entrepreneurs.	Mark Sanders, Christine Lauritzen	5-6 Nov 15	http://www.projectfires.eu/news/fires-present-at-european-conference-on-the-future-internet/	Humboldt University event
Event	the New Dutch	FIRES engaged with bankers and startups to discuss ways in which the financial sector can facilitate entrepreneurship at The New Dutch	Mark Sanders	13th Nov 15	http://www.projectfires.eu/news/fires-at-the-new-dutch/	Holland Fintech event, Amsterdam

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Event	the general assembly of the International Federation of Liberal Youth in Thessaloniki, Greece	FIRES-philosophy that the transition to an Entrepreneurial Society in Europe is urgent, desirable and necessary and pitched some radical financial, labor and knowledge institutional reforms to make that transition happen	Mark Sanders	2nd June 2017	http://www.projectfires.eu/news/fires-coordinator-addresses-young-liberals-in-thessaloniki/	Thessaloniki, greece
Event	IECER 2016	INSTITUTIONS FOR AN ENTREPRENEURIAL SOCIETY TRACK AT THE 14TH INTERDISCIPLINARY EUROPEAN CONFERENCE ON ENTREPRENEURSHIP RESEARCH	Mark Sanders, Luca Grilli, Selin Dilli & Gresa Latifi	7th - 9th Sep 2016	http://www.projectfires.eu/news/call-for-papers-institutions-for-an-entrepreneurial-society-track-at-the-14th-interdisciplinary-european-conference-on-entrepreneurship-research/	Chur, Switzerland
Event	OECD Innovation		Erik Stam	Sep-16		
Event	ICUBERD	Entrepreneurial Ecosystems & Regional Policy	Erik Stam	Dec-16		Pecs, Hungary

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Event: Startup Delta Startup Fest	UU Campus Party	presented three radical ideas for the European Entrepreneurial Society to an audience of young (wannabee) entrepreneurs	Mark Sanders	27th May 2016	http://www.projectfires.eu/news/fires-presented-preliminary-reform-proposals-at-campus-party/	Utrecht, Netherlands
Event	FIWARESummit	Attended the FIWARE annual summit and spoke to many involved in business incubation in smart and big data solutions.	Mark Sanders	May 17		Utrecht, Netherlands
Event	IECER 2017	presented FIRES-work in a track dedicated to the Entrepreneurial Society	Mark Sanders, Niels Bosma, Jeroen Content & Werner Liebrechts	22nd Sep 2017	http://www.projectfires.eu/news/fires-at-iecerc2017/	Siegen, Germany

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Event	WINIR 2017	a concerted effort to reach out to the academic stakeholders in the project and collect their feedback and suggestions on our work	Mark Sanders, Koen Frenken, Andrea Hermann & Jacob Jordaen		http://www.projectfires.eu/news/fires-at-winir-2017/	Utrecht
Utrecht University	Innovation Studies Group Research Day		Lukas Held	Jun-17	Pictures (Andrea Hermann)	UU internal event
Event:	REINVENT stakeholders workshop	Looking for new pathways towards decarbonising high carbon intensive industries	Mark Sanders	17th May 2017	http://www.projectfires.eu/news/fires-represented-at-reinvent-stakeholders-workshop/	
Event	ERSA 2017	Key topics included innovation, entrepreneurship, resilience and regional policy	Jacob Jordaen, Jeroen Content & Koen Frenken	Aug-17	http://www.projectfires.eu/uncategorized/fires-at-ersa-2017/	Uni of Groningen

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Event	FIWARE Smart Cities Conference	Attended the FIWARE conference and spoke to many involved in business incubation in smart and big data solutions.	Mark Sanders	23-Sep-15	https://www.fiware.org/2015/11/30/dutch-cities-collaborate-on-open-and-agile-smart-cities/	
Workshop	DG Grow	Presented the FIRES project to a delegation of DG Grow to discuss collaborations	Mark Sanders, Phillipe de Man and Axel Marx	06-Oct-15		Brussels, Belgium
Seminar	Academics at Utrecht School of Economics	Saul Estrin presented his work at Utrecht School of Economics	Saul Estrin	08/10/2015		Utrecht, Netherlands
Seminar	Private Equity and Venture Capital Investors	Attended the annual NVP seminar to network with private equity and venture capital investors	Mark Sanders	09/11/2015	http://www.nvp.nl/evenement_detail/seminar2015/	Amsterdam, Netherlands
Conference	European Social Business Forum	Attended the European Social Business Forum	Mark Sanders	12/04/2016	http://www.grameencreativelab.com/esbf2016	Utrecht, Netherlands

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Moderation	General Public	Moderated the book discussion by David Audretsch	Mark Sanders	12/02/2017	https://duitslandinstituut.nl/agenda/4992/lezing-david-audretsch-over-the-seven-secrets-of-germany	Amsterdam, Netherlands
Seminar	Academics at Utrecht School of Economics	Presentation D3.7	Christine Lauritzen	23/05/2017		
Workshop	Stakeholder workshop on innovation policy by the city of Vienna	Keynote speaker	Koen Frenken	25/08/2016		Vienna, Austria
Essay	Het Financieele Dagblad, (p. 9)	Koppel topsectorenbeleid niet aan maatschappelijke uitdagingen. Het Financieele Dagblad, (p. 9) (op-ed, in Dutch, "Do not link top sector policy to societal challenges)".	Koen Frenken	15/08/2017		Het Financieele Dagblad, (p. 9) (op-ed, in Dutch, "Do not link top sector policy to societal challenges)".

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Essay	Netherlands Ministry of Economic Affairs	Innovatiebeleid in tijden van maatschappelijke uitdagingen, essay voor ministerie van Economische Zaken	Koen Frenken	May 2016		Netherlands Ministry of Economic Affairs
Seminar		Presentation of Deliverable 2.5 in Economic and Social History lunch seminar	Selin Dilli	09-Nov-17	presentation	Utrecht
Event		Question: Is there a reason FIRES events such as Fires conference in October 2017 or the meeting in Athens not included?				Utrecht
Seminar	Invited panelist "Educate from Curiosity" Hogeschool Arnhem Nijmegen	FIRES reform proposals for education to strengthen the entrepreneurial society in EU-Region	Mark Sanders	18/04/2018		Nijmegen
Seminar	Invited speaker 'Experiences of EU funding	Montpellier Business School	Mark Sanders	02/05/2018		Montpellier

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Participation to a workshop	14th IECER Conference	Presentation of initial results as to Deliverable 2.3. (Venture capital in Europe) and Deliverable 5.6 (Case study on Italian YICs)	Luca Grilli-Emanuele Giraudo-Gresa Latifi	September 2016	Programme (available)	FIRES logo used
Presentation at other event	Minister of Economic Development, Italian startupper associations, Confindustria, Consob, Chambers of Commerce representatives, academics	Intervention on the importance of a monitoring and evaluation system for the Italian Start up ACT	Luca Grilli	December 2015	Programme (available)	FIRES mentioned
Participation to a conference	DRUID Conference 2017	Presentation of intermediate results as to Deliverable 5.6 (Case study on Italian YICs)	Boris Mrkajic	June 2017	Programme: https://conference.druid.dk/Druid/?confId=23/ Tweets and pictures (Available)	FIRES logo used

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Presentation at other event	Public Seminar at the Center for Innovation, Technology and Policy Research, IN+/IST (Universidade de Lisboa)	Presentation of intermediate results as to Deliverable 5.6 (Case study on Italian YICs)	Luca Grilli	May 2017	Pictures available (and tweets)	FIRES logo used
Participation to a conference	EARIE 2017 (European Association for Research in Industrial Economics)	Presentation of final results as to Deliverable 5.6 (Case study on Italian YICs)	Emanuele Giraudo	September 2017	Programme: https://editorialexpress.com/conference/EARIE2017/program/EARIE2017.html	FIRES logo used
Participation to a conference	WINIR 2017	Presentation of intermediate results as to Deliverable 2.3. (Venture capital in Europe) and final results on Deliverable 5.6 (Case study on Italian YICs)	Emanuele Giraudo-Gresa Latifi	September 2017	Programme (Available)/Tweets and pictures (Available)	FIRES logo used

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Participation to a conference	14th ENEF Meeting on Technological change and employment dynamics at the firm and industry level (Scuola S. Anna di Pisa)	Presentatio of final results as to Deliverable 5.6 (Case study on Italian YICs)	Luca Grilli	September 2017	Programme (Available)	FIRES logo used
Participation to a conference	INTERNATIONAL CONFERENCE ON SMALL BUSINESSES, BANKS, FINANCE, INNOVATION AND GROWTH (University of Urbino)	Presentatio of final results as to Deliverable 5.6 (Case study on Italian YICs)	Luca Grilli	September 2017	Programme (Available)/Tweets and pictures (Available)	FIRES logo used
Participation to a conference	AiIG 2017 (Associazione Italiana Ingegneria Gestionale)	Presentation of final results as to Deliverable 2.3. (Venture capital in Europe)	Gresa Latifi	October 2017	Programme (Available)/Tweets and pictures (Available)	FIRES logo used

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Press release	General Media	Presenting FIRES and reporting final results as to Deliverable 5.6 (Case study on Italian YICs)	Unione Ingegneri	October 2017	http://www.unioneingegneri.com/news/03/10/2017/il-politecnico-di-milano-partecipa-a-fires-un-progetto-horizon-2020-per-una-nuova-imprenditorialita-europea_5802.html	
Press release	General Media	Presenting FIRES and reporting final results as to Deliverable 5.6 (Case study on Italian YICs)	La Discussione	October 2017	http://www.ladiscussione.com/societa/item/142605-universita-start-up-in-europa-politecnico-milano-partecipa-a-fires.html	
Press release	General Media	Presenting FIRES and reporting final results as to Deliverable 5.6 (Case study on Italian YICs)	Italpress	October 2017	http://www.italpress.com/politecnico-milano/start-up-in-europa-politecnico-partecipa-a-fires	
Press release	General Media	Presenting FIRES and reporting final results as to Deliverable 5.6 (Case study on Italian YICs)	Byinnovation	October 2017	http://byinnovation.eu/lanciare-start-europa/	

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Press release	General Media	Presenting FIRES and reporting final results as to Deliverable 5.6 (Case study on Italian YICs)	Omnimilano	October 2017	www.omnimilano.it/lector/stampa.php?type=text&idNews=377451	
Press release	General Media	Interview to Luca Grilli on FIRES	Il Diario del Web	October 2017	https://www.diariodelweb.it/innovazione/articolo/?nid=20171017_456270	
Stakeholders consultation	Industry	Reform ideas were presented to and discussed with business representatives	Axel Marx, Andrei Suse, other FIRES researchers	14 October 2016	https://www.projectfires.eu/news/fires-conference-utrecht/	Utrecht, Netherlands; event took place in the context of the first FIRES annual conference
Stakeholders consultation	Policy makers, industry, scientific community, investors	Reform agenda for Italy was presented to and discussed with government officials, international civil servants, investors, and academics	Mark Sanders, Luca Grilli, Erik Stam, Andrei Suse	5 March 2018	https://www.projectfires.eu/news/fires-reform-strategy-for-italy/	Rome, Italy; host Cassa Depositi e Prestiti

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Discussion with stakeholders	Policy makers and civil society	Discussion on entrepreneurial environment in Greece	Axel Marx, Andrei Suse, other FIRES researchers	6 October 2017	http://www.projectfires.eu/wp-content/uploads/2018/02/D1.4-REVISED.pdf	Athens, Greece; event took place in the context of the second FIRES annual conference
Stakeholders consultation	Industry	Reform ideas were presented to and discussed with business representatives	Mark Sanders, Dimitris Karamanis and other FIRES researchers	14 October 2016	https://www.projectfires.eu/news/fires-conference-utrecht/	Utrecht, Netherlands; event took place in the context of the first FIRES annual conference
Discussion with stakeholders	Policy makers and civil society	Discussion on entrepreneurial environment in Greece	Mark Sanders, Dimitris Karamanis and other FIRES researchers	6 October 2017	http://www.projectfires.eu/wp-content/uploads/2018/02/D1.4-REVISED.pdf	Athens, Greece; event took place in the context of the second FIRES annual conference
Discussion with stakeholders	Academic and policy makers	Discussion on knowledge creation, diffusion and entrepreneurial environment in EU	Mark Sanders, Dimitris Karamanis and other FIRES researchers	19-Jan-18	http://www.projectfires.eu	Piraeus, Greece, event took place in the framework of roundtables policy discussions

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Academic presentation	Academic	Discussion of research findings (D3.10)	myself	20-Feb-18	http://blogs.lse.ac.uk/greeceatlse/2018/02/14/entrepreneurship-activity/	LSE, UK Research Seminar
Participation to a workshop	4th Central European PhD Workshop on Regional Economics and Business Studies	Presentation on D4.4 (Title: Measuring and examining regional entrepreneurship ecosystems: The Regional Entrepreneurship and Development Index perspective)	László Szerb	14-15 April 2016	http://www.eco.u-szeged.hu/english/research/conferences-workshops/4th-central-european-phd-workshop/4th-central-european-phd-workshop	Szeged, Hungary (plenary speaker)
Participation to a conference	56th ERSA Congress	Presentation on D4.4 (Title: Differences in entrepreneurship in EU regions based on the REDI methodology)	László Szerb, Éva Komlósi	23-27 August 2016	http://ersa.org/wp-content/uploads/2016/01/ERSA_congress_book_Vienna_2016_low.pdf	Vienna, Austria

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Participation to a conference	Rencontres de St-Gall 2016; Institutional context and governance of SMEs and family firms: Trends and challenges	Presentation on D4.2 (Title: Measuring entrepreneurship and optimizing entrepreneurship policy efforts in the European Union countries)	László Szerb	29-31 August 2016	https://kmu-hsg.ch/rencontres2016/topic_b.html	St. Gallen, Switzerland
Participation to a conference	30th RENT Conference	Presentation on D4.5 (Title: How to boost entrepreneurship in the European Union?)	László Szerb	16-18 November 2016	http://www.rent-research.org/userfiles/Detailed%20programme%20Rent%20XX%20%2021%2010%202016.pdf	Antwerp, Belgium

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Organisation of Conference	1st ICUBERD Conference (International Conference on University-based Entrepreneurship and Regional Development: Theory, Empirics and Practical implementation)	Invited keynote speaker from FIRES research community: Erik Stam (UU); Presentation on D4.4 (Title: Comparative analysis of entrepreneurship in European regions based on the REDI methodology); Roundtable on D5.8 (in Hungarian; Title: Evaluation of the Hungarian new-tech entrepreneurial ecosystem)	László Szerb, Éva Komlósi, Balázs Páger	1-2 December 2016	Presentation, photo, programme	Pécs, Hungary
Participation to a workshop	Workshop on "Evolution and Co-Evolution of Regional Innovation Processes"	Presentation on D4.5 (Title: The relevance of quantity and quality entrepreneurship for regional performance: The moderating role of the entrepreneurial ecosystem)	László Szerb	29 June 2017	Presentation	Heilbronn, Germany

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Participation to a conference	WINIR 2017	Presentation on D4.4 (Title: Resource optimization in regional context: regional entrepreneurship policy scenarios in the European Union)	László Szerb	14-17 September 2017	https://winir.org/?page=past_events&side=winir_2017&sub=programme	Utrecht, The Netherlands
Participation to a conference	G-Forum 2017 Conference	Presentation (Title: The evolution of entrepreneurial overconfidence and its impact on concurrence and growth expectations along the business life cycle: the effect of experience and learning by doing)	Zsófia Vörös	4-6 October 2017	https://www.fgf-ev.de/wp-content/uploads/2017/09/G-Forum-2017-Program-27-09-2017.pdf	Wuppertal, Germany
Participation to a conference	BGE-MTÜ Conference 2017	Presentation on D4.4 (Title: Entrepreneurial ecosystem and entrepreneurial activity in the European Union regions)	László Szerb	9th November 2017	https://uni-bge.hu/Kutatasi-tevekenyseg/dokumentumok/Konferenciak/MTU-2017/MTU2017	Budapest, Hungary

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Organisation of Conference	2nd ICUBERD Conference (International Conference on University-based Entrepreneurship and Regional Development: Theory, Empirics and Practical implementation)	Invited keynote speaker from FIRES research community: Mark Sanders (UU); Roundtable on D4.4 and D4.5 (Title: Practitioners Workshop on using GE(D)I/REDI to improve Europe's entrepreneurial ecosystem)	László Szerb, Balázs Páger	30 November - 1 December 2017	http://icuberd.ktk.pt.e.hu/sites/icuberd.ktk.pt.e.hu/files/mellekletek/2017/11/icuberd_program_bovitett_0.pdf#overlay-context=program	Pécs, Hungary
Participation to a conference	20th International Conference on Creativity and Entrepreneurial Behavior	Presentation (Title: Moderators of the Relationship between Entrepreneurial Self-Efficacy and Expected Firm Growth)	Zsófia Vörös	5-6 March 2018	https://waset.org/conference/2018/03/rome/program	Rome, Italy

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Non-scientific and non-peer reviewed publications (popularised publications)	General Public/Policy Makers/Medias/Scientific Community	Description of Fires and the project in IFN Newsletter (Swedish)	Magnus Henrekson	June-2015	https://www.ifn.se/publikationer/nyhetsbrev/nyhetsarkiv/2015/nyhetsbrev-4-2015 ; in Swedish	Newsletter opened by 1 278
Other	General Public/Policy makers/Medias	Report (text and photos) from Fires' kick-off event in Berlin	Niklas Elert, Magnus Henrekson, Mikael Stenkula	Sep-15	https://www.ifn.se/eng/about_ifn/news/headlines-2015/2015-09-07-kick-off-for-the-eu-project-on-entrepreneurship ; in English	Web site (Swedish and English) is to 70 % visited by Swedes, the next target country of origin is the US. During the week after this news was posted about 2 000 individuals visited the site.

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Other	General Public/Policy Makers/Medias/Scientific Community	Report (text and photos) from Fires' kick-off event in Berlin	Niklas Elert, Magnus Henrekson, Mikael Stenkula	Sep-15	https://www.ifn.se/om_ifn/aktuellt/aktuellt-2015/2015-09-07-eu-projekt-sjosatt-i-berlin ; in Swedish	See above
Presentation at other event	Industry	Presentation of Fires to the board of IFN.	Magnus Henrekson	Feb-16	Folder; members of the board: https://www.ifn.se/om_ifn/styrelse_1	Documentation not online. Folder about Fires distributed.
Non-scientific and non-peer reviewed publications (popularised publications)	Policy Makers/Industry/Medias/Investors	Annual report 2016: Presentation of IFN's research and researchers in 2015; incl. Fires and the Kick-off in Berlin	Niklas Elert, Magnus Henrekson, Mikael Stenkula	March-2016	Book, also published in a digital version on ifn.se; https://www.ifn.se/publikationer/arsbocker/aldre-arsbocker/arsbok-2016	Annual report published March 10, 2016; 650 copies sent by mail and hundreds more distributed at events during the year.

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Other	General Public/Policy Makers/Medias/Scientific Community	News on home page of IFN - Swedish and English about the first Fires-working paper that was published at IFN; Swedish	Niklas Elert	March 23, 2016	https://www.ifn.se/om_ifn/aktuellt/aktuellt-2016/2016-03-23-wp-fires ; website in Swedish	Website (Swedish and English) is to 70 % visited by Swedes, the next largest country of origin is the US. During the week after this news was posted about 1 000 individuals visited the site.
Other	General Public/Policy Makers/Medias/Scientific Community	News on home page of IFN -- Swedish and English about the first Fires-working paper that was published at IFN; Swedish	Niklas Elert	March 23, 2016	https://www.ifn.se/eng/about_ifn/news/headlines-2016/2016-03-23-wp-fires ; website in English	See above

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Social media	General Public/Policy Makers/Medias/Scientific Community	Presentation of upcoming seminar (May 23) about "Institutional reform for innovation and entrepreneurship: An agenda for Europe" by Niklas Elert, Magnus Henrekson and Mikael Stenkula.	Niklas Elert, Magnus Henrekson and Mikael Stenkula	May 9, 2017	Post on Facebook	
Other	General Public/Policy Makers/Medias/Scientific Community	News on ifn.se about the recently published book "Institutional Reform for Innovation and Entrepreneurship: An Agenda for Europe" (SpringerBrief in Economics 2017) by Niklas Elert, Magnus Henrekson and Mikael Stenkula.	Niklas Elert, Magnus Henrekson and Mikael Stenkula	May 12, 2017	https://www.ifn.se/eng/about_ifn/news/headlines-2017/2017-05-12-springerbrief-in-economics ; website in English	Website (Swedish and English) is to 70 % visited by Swedes, the next largest country of origin is the US. During the week after this news was posted almost 3 000 individuals visited the site.

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Other	General Public/Policy Makers/Medias/Scientific Community	Pitch for upcoming seminar May 23, 2017 in IFN Nyhetsbrev (Newsletter) no 1/2017, no 2/2017 and no 3/2017.	Niklas Elert, Magnus Henrekson and Mikael Stenkula	Feb-, March and April 2017	In IFN Swedish newsletters; https://www.ifn.se/publikationer/nyhetsbrev/nyhetsarkiv	Newsletters opened by 3 751 individuals
Organisation of a workshop	General Public/Policy Makers/Medias/Scientific Community	Seminar. Presentation of the Fires project and report "Institutional Reform for Innovation and Entrepreneurship: An Agenda for Europe". Panel: Jeanette Andersson, Angel Investor, Anna Maria Corazza Bildt, MEP, Magnus Henrekson, IFN, Håkan Hillefors, Ministry of Enterprise and Innovation, and Peter Voigt, EU Commission.	Magnus Henrekson	May 23, 2017	Seminar at Europahuset in Stockholm, jointly organized by the IFN and the European Commission's Representation in Sweden.	About 80 participants; video posted on YouTube

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Other	General Public/Policy Makers/Medias/Scientific Community	News and video from seminar May 23, 2017, on IFN website (Swedish and English)	Magnus Henrekson	May 23, 2017	Website in Swedish; https://www.ifn.se/om_ifn/aktuellt/aktuellt-2017/2017-05-23-institutional-reform-for-innovation-and-entrepreneurship-an-agenda-for-europe	Website (Swedish and English) is to 70 % visited by Swedes, the next largest country of origin is the US. During the week after this news was posted almost 2 500 individuals visited the site.
Other	General Public/Policy Makers/Medias/Scientific Community	News and video from seminar May 23, 2017, on IFN website (Swedish and English)	Magnus Henrekson	May 23, 2017	Website in English; https://www.ifn.se/eng/about_ifn/news/headlines-2017/2017-05-23-institutional-reform-for-innovation-and-entrepreneurship-an-agenda-for-europe	See above

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Other	General Public/Policy Makers/Medias/Scientific Community	Presentation of working paper no. 1170 "Schumpeterian Entrepreneurship in Europe Compared to Other Industrialized Regions" by Magnus Henrekson and Tino Sanandaji.	Magnus Henrekson	July 19, 2017	Website in Swedish; https://www.ifn.se/om_ifn/aktuellt/aktuellt-2017/2017-07-19-underskott-pa-entreprenorskap-i-europa	Website (Swedish and English) is to 70 % visited by Swedes, the next largest country of origin is the US. During the week (this is vacation time in Sweden) after this newsletter was posted approx. 1 600 individuals visited the site.
Other	General Public/Policy Makers/Medias/Scientific Community	Presentation of working paper no. 1170 "Schumpeterian Entrepreneurship in Europe Compared to Other Industrialized Regions" by Magnus Henrekson and Tino Sanandaji.	Magnus Henrekson (and Tino Sanandaji)	July 19, 2017	Website in English; https://www.ifn.se/eng/about_ifn/news/headlines-2017/2017-07-19-entrepreneurship-deficit-in-europe	See above

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Social media	General Public/Policy Makers/Medias/Scientific Community	Presentation of working paper no. 1170 "Schumpeterian Entrepreneurship in Europe Compared to Other Industrialized Regions" by Magnus Henrekson and Tino Sanandaji.	Magnus Henrekson	July 31, 2017	Post on Facebook about webpost July 19 2017	
Press release	Medias	About article in Swedish economics magazine Ekonomisk Debatt no 5/2017	Niklas Elert, Magnus Henrekson and Mikael Stenkula	September 13 2017	Press release	Emailed to about 250 Swedish journalists writing about economics

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Organisation of a workshop	General Public/Policy Makers/Medias/Scientific Community	Seminar. Presentation of the Fires project and report "Institutional Reform for Innovation and Entrepreneurship: An Agenda for Europe". Panel: Slawomir Tokarski, Director for Innovation and Advanced Manufacturing in the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs at the European Commission, Gunnar Hökmark, MEP (M), Jacop Dalunde MEP (MP), and Magnus Henrekson.	Magnus Henrekson	November 28, 2017	Seminar at the Permanent Representation of Sweden to the EU, in Brussels, hosted by the Permanent Representation of Sweden to the EU and jointly organized by the Confederation of Swedish Enterprise and IFN.	About 70 participants

Type of dissemination and communication activities	Type of audience reached/target group	Brief description of the activity	Researcher involved	Date of the event	Evidence (i.e. presentation, conference program, link to website, pictures with the logo presented, press release etc.)	Notes
Other	General Public/Policy Makers/Medias/Scientific Community	News and video from seminar November 28, 2017, on IFN website (Swedish and English)	Magnus Henrekson	November 28 2017	Website in Swedish	Website (Swedish and English) is to 70 % visited by Swedes, the next target country of origin is the US. During the week after this news was posted about 1 600 individuals visited the site.
Other	General Public/Policy Makers/Medias/Scientific Community	News and video from seminar November 28, 2017 on IFN website (Swedish and English)	Magnus Henrekson	November 28, 2017	Website in English	See above
	General Public/Policy Makers/Medias/Scientific Community	Newsletter about seminar in Brussels (see above)	Magnus Henrekson	Dec-17	Newsletter 7/2017	Newsletters opened by 1 259 individuals

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Non-scientific and non-peer reviewed publications (popularised publications)	Policy Makers/Industry/Medias/Investors	Annual report 2017: Presentation of IFN's research and researchers in 2017; incl. Fires.	Niklas Elert, Magnus Henrekson and Mikael Stenkula	March-2018	The annual report is mailed to about 700 individuals. It is also published on ifn.se.	The annual report is mailed to about 700 individuals. It is also published on ifn.se, hundreds more distributed at events during the year.
Other	General Public/Policy Makers/Medias/Scientific Community	Pitch for upcoming final Fires conference in Brussels on May 25, 2018 in IFN Newsletters no 1/2018, 2/2018, 3/2018	Magnus Henrekson	Feb-, March and April 2018	IFN Newsletters in Swedish	Newsletters opened by approx. 3 500 individuals

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Seminar	Civil society	Talk included in a conference promoting entrepreneurship for individuals aged 45 or over who are unemployed (Project 4560). Presentation: "Tarde demais para empreender?" (Is it too late to start a business?).	Catarina Seco Matos	April 2017	https://www.dropbox.com/s/sp3vyq9zjs6ldqb/18abril207.pdf?dl=0	
Seminar	Invited Speaker: Luca Grilli (Politecnico di Milano)	Presentation: Do the rules of the game determine who is playing? Institutional Change, Entrepreneurship and Human Capital; Luca Grilli	Luca Grilli	May 2017	https://tecnico.ulisboa.pt/pt/eventos/seminario-in-por-lucca-grilli/	

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Workshop	Industry, workers of EDP - www.edp.pt	Workshop oriented to individuals working in EDP (Portugal's main electricity provider) who would retire in the following year or two years. The workshop provided workers with information about active ageing and retirement. The possibility of starting a business was one of the dimensions approached. Presentation: "Empreendedorismo sénior: desafios e oportunidades" (Senior entrepreneurship: challenges and opportunities)	Catarina Seco Matos	June 2017		

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Conference/ Workshop	WINIR 2017: World Interdisciplinary Network for Institutional Research	Presentation: Senior entrepreneurship: a critical review and research / policy agenda - Portugal's Case-study	Catarina Seco Matos, Miguel Amaral	September 2017	https://winir.org/?page=past_events&side=winir_2017&sub=programme	
Seminar	Policy makers, civil society, public and private institutions	Seminar held by "Santa Catarina" a parish in Lisbon, within a project aimed at enhancing employability at the local level. Presentation: Senior Entrepreneurship	Catarina Seco Matos	September 2017		
Conference	A sustainable society for all ages, UNECE Ministerial conference on ageing	Poster: Senior entrepreneurship	Catarina Seco Matos	September 2017		
Conference	EY Beyond - Portugal Digital Revolutions: Active ageing in the digital age (Ernst & Young)	Presentation: Active ageing and senior entrepreneurship in the digital age	Miguel Amaral	October 2017		

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Conference	5th International Workshop on the Socio-Economics of Ageing - October 2017	Poster: Business satisfaction among senior entrepreneurs: The moderating effect of industry experience and unemployment status	Catarina Seco Matos	October 2017	http://www.iwsea.pt/program/	
Seminar	Civil society	Roundtable hosted by a portuguese project aiming at promoting entrepreneurship for unemployed individuals aged 45 or over (Project 4560)	Catarina Seco Matos	November 2017	https://empreender4560.pt/seminarios-workshops/	
Roundtable	Roundtable FIRES – Inclusive Entrepreneurship	Roundtable hosted by the FIRES Project in Lisbon, Portugal, involving several reputed entrepreneurs, policymakers and academics.	Catarina Seco Matos, Miguel Amaral, Mark Sanders	March 2018		

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Seminar (forthcoming)	Ministry of Economics - Policy makers, researchers	Presentation: Business satisfaction among senior entrepreneurs: the effect of industry experience and unemployment status	Catarina Seco Matos, Miguel Amaral	May 2018	-	
Presentation at the annual meeting of the Laboratory of Entrepreneurship Research	scientific community at the National University Higher School of Economics, Moscow, Russia	Presentation of a research paper about financial well-being of entrepreneurs, as compared to non-entrepreneurs.	Alina Sorgner, Michael Fritsch, Alexander Kritikos	September 14, 2015	https://www.hse.ru/en/news/158916835.html	

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Presentation at a conference	scientific community at ERSA Congress in Vienna, Austria	Presentation of a research paper about the persistence of entrepreneurship over time and space, followed by a discussion of the role of institutions for fostering entrepreneurship in regions	Michael Fritsch, Alina Sorgner, Michael Wyrwich, Evgueniy Zazdravnykh	August 23-26, 2016	http://ersa.org/wp-content/uploads/2016/01/ERSA_congress_book_Vienna_2016_low.pdf	
Presentation at a conference	scientific community at the Stockholm School of Economics in Riga, Latvia	Presentation of a research paper about the role of informal institutions in a region, such as a social value of acceptance of risk-taking behavior, for entrepreneurship.	Alina Sorgner	May 19-20, 2016	http://www.sseriga.edu/en/news-and-events/upcoming-events/ncsb2016.html	

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Presentation at a workshop	Scientific community/Industry at the Stockholm School of Economics in Riga, Latvia	Presentation of a research paper about the persistence of entrepreneurship over time and space, followed by a discussion of the role of institutions for fostering entrepreneurship in regions	Michael Fritsch, Alina Sorgner, Michael Wyrwich, Evgueniy Zazdravnykh	March 11, 2016	http://www.sseriga.edu/en/news-and-events/upcoming-events/entrepreneurshipinthealiningrad.html	
Presentation at a conference	Scientific community at the 3rd Geography of Innovation Conference in Toulouse, France	Presentation of a research paper about the persistence of entrepreneurship over time and space, followed by a discussion of the role of institutions for fostering entrepreneurship in regions	Michael Fritsch, Alina Sorgner, Michael Wyrwich, Evgueniy Zazdravnykh	January 27-30, 2016	https://geoinnov2016.sciencespo-toulouse.fr/portal/IMG/pdf/general_program_22012016.pdf	

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Presentation at a workshop	scientific community at the Workshop on Entrepreneurship and Public Policy, Oslo Fiscal Studies at the University of Oslo, Norway	Presentation of a research paper about financial well-being of entrepreneurs, as compared to non-entrepreneurs.	Alina Sorgner, Michael Fritsch, Alexander Kritikos	September 16, 2016	https://www.sv.uio.no/econ/english/research/centres/of s/news-and-events/events/dokumenter/program_lateaugust.pdf	
Presentation at a workshop	scientific community at the IWH Workshop on Entrepreneurship and the Labour Market, Institute for Economic Research Halle, Germany	Presentation of a research paper about financial well-being of entrepreneurs, as compared to non-entrepreneurs.	Alina Sorgner, Michael Fritsch, Alexander Kritikos	April 22, 2016	http://www.iwh-halle.de/fileadmin/user_upload/events/workshops/2016/Labour_Market/Programm.pdf	

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Presentation at a conference	scientific community/general public/Entrepreneurs at the 9th Beyond Humanism Conference, John Cabot University Rome, Italy	Presentation of a research paper about the persistence of entrepreneurship over time and space, followed by a discussion of the role of institutions for fostering entrepreneurship in regions	Michael Fritsch, Alina Sorgner, Michael Wyrwich, Evgueniy Zazdravnykh	July 20-22, 2017	http://beyondhumanism.org/blog/2016/05/14/%E2%80%8Bthe-9th-beyond-humanism-conference-rome/	
Organization of 2 special sessions at a conference	Scientific community at the 56th Congress of the European Regional Science Association (ERSA) in Vienna (Austria)	Organization of two special sessions on the role of institutions and culture on regional entrepreneurship	Michael Fritsch, Michael Wyrwich, Marcus Dejardin	August 23-26, 2016	http://ersa.org/wp-content/uploads/2016/01/ERSA_congress_book_Vienna_2016_low.pdf	
Presentation at a conference	Scientific community at the 56th Congress of the European Regional Science Association (ERSA) in Vienna (Austria)	Presentation of a paper on the effect of culture on entrepreneurship	Michael Wyrwich, Michael Stuetzer	August 23-26, 2016	http://ersa.org/wp-content/uploads/2016/01/ERSA_congress_book_Vienna_2016_low.pdf	

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Invited talk on entrepreneurship	Scientific community at Universite de Caen (France)	Presentation of a paper on the effect of culture on entrepreneurship	Michael Wyrwich	January 31, 2017		
Presentation at a conference	ERSA 2017	Presentation on the relationship between culture, entrepreneurship, and innovation	Michael Wyrwich, Michael Fritsch	29 August - 1 September 2017	https://ersa.eventsair.com/QuickEventWebsitePortal/2017-ersa-congress/official-website/Agenda	
Presentation at a conference/ Joint FIRES project discussions	WINIR 2017	a concerted effort to reach out to the academic stakeholders in the project and collect their feedback and suggestions on our work	Mark Sanders, Koen Frenken, Andrea Hermann & Jacob Jordaan	14-17 September 2017	http://www.projectfires.eu/news/fires-at-winir-2017/	

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Host: Workshop on regional entrepreneurship	scientific community/general public/entrepreneurs /practitioners in the German state of Thuringia	Organization of workshop where invited entrepreneurship scholars presented their thoughts on future challenges of entrepreneurship research	Michael Wyrwich, Michael Fritsch, Moritz Zoellner	January 17, 2018	https://www.flickr.com/photos/162363955@N07/sets/72157662998711857/	
Workshop on knowledge frontiers and entrepreneurship	Scientific community at the workshop in Berlin	One presentation on the drivers of academic entrepreneurship in Germany and one presentation on the relationship between culture, entrepreneurship, and innovation	Michael Wyrwich; Michael Fritsch	March 9, 2018	https://global.iu.edu/global-gateways/europe/news-events/events/2018-03-08-workshop-knowledge-frontiers-and-entrepreneurship.html	
Presentation at a conference	Bi-annual Conference of the International Joseph Schumpeter Society in Montreal (Canada)	Presentation of a paper on the effect of culture on entrepreneurship	Michael Fritsch, Alina Sorgner, Michael Wyrwich, Evgueniy Zazdravnykh	July 7, 2016		

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Consultation workshop for stakeholders on related variety and growth	State Minister, State Secretary of the Federal Ministry of Economic, people from regional development agencies, etc.	Presentation on the effect of new technologies, regional diversification, growth, and regional policy	Michael Wyrwich	August 22 2017	Report to the EU	
Round Table "A Growth Strategy for Germany"	Policy makers of the German Ministry of Economics, Researchers, representatives of Chambers of Commerce, etc.	Presentation of a Growth Strategy for Germany and discussion	Michael Fritsch, Michael Wyrwich, Mark Sanders	April 24 2018	Report to the EU; https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2018/20180424-mittelstandsbeauftragter-hirte-innovationsfreundlichkeit-fuer-einen-florierenden-mittelstand.html	
General public lecture	Academics from different institution	Presentation on the role of entrepreneurship for regional development and entrepreneurship policy	Michael Fritsch	Jena January 17 2018		

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Workshop	Start-up consultants of Thuringian Universities, Administrators from the Thuringian Ministry of Economics, representatives of the Thuringian Chambers of Commerce and of Universities	Presentation on the role of new business formation for regional development	Michael Fritsch	Erfurt, November 17 2015		
OECD Working Party on Territorial Indicators	Representatives of statistical offices and ministries of OECD countries	Presentation on new business formation and development in a regional context	Michael Fritsch	Paris, November 7 2016		

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Winter conference of the Regional Studies Association	Academic	Presentation on persistence of regional entrepreneurship and regional entrepreneurship culture	Michael Fritsch	London, November 19 2015		
Conference of the Regional Studies Association	Academic	Presentation on the interplay of related and unrelated variety with entrepreneurship	Michael Fritsch	Graz, May 4 2016		
International Workshop in Entrepreneurship, Culture, Finance and Economic Development	Academic	Keynote lecture on persistence of entrepreneurship and entrepreneurship culture	Michael Fritsch	Lyon, June 23 2016		

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Congress of the European Regional Science Association	Academic	Presentation on persistence of regional entrepreneurship and regional entrepreneurial culture	Michael Fritsch, Alina Sorgner, Michael Wyrwich	Vienna, August 24 2016		
Congress of the European Regional Science Association	Academic	Presentation on historical tradition of entrepreneurship, entrepreneurship culture, innovation and growth	Michael Fritsch, Michael Wyrwich	Groningen, September 1 2017		
Internal Workshop in Bundeskanzleramt	Economic Advisers to Chancellor Angela Merkel	Presentation on the role of entrepreneurship for growth and respective policy options	Michael Fritsch	Berlin, December 6 2017		

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International Workshop “Evolution and Co-Evolution of Regional Innovation Processes” and Policy Day	Academics (1st day), policy makers and administration (2nd day)	Two presentations on entrepreneurship culture, innovation and growth	Michael Fritsch, Michael Wyrwich	Heilbronn, June 29 and 30 2017		