Report - Policy Brief on the FIRES 7-step Method for Entrepreneurship Policy Making

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Financial and Institutional Reforms for Entrepreneurial Society (FIRES)

Policy brief on the FIRES 7-step Method for Entrepreneurship Policy Making

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Abstract

This policy brief explains the 7-step FIRES method for entrepreneurship 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 designing a tailor-made reform strategy for strengthening their entrepreneurial ecosystem. This FIRES 7-step method is applicable to all levels of governance, be it the European, national, regional level or local level. An animated presentation of the policy brief is available here.

Introduction

The FIRES-project ended May 31st 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 of FIRES is: by strengthening entrepreneurial ecosystems throughout the EU in order to create an entrepreneurial society. The more important subsequent question is: how. It was established firmly in the FIRES project that that question does not have a single and uniform answer. Europe has a rich and diverse historically evolved institutional

[1] The authors thank Andrea Hermann for her input on step 5

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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 entrepreneurial 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 which is firmly based in the scientific literature and which were developed in dialogue with stakeholders and policy makers. 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 this document 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. This policy brief reports on the FIRES approach.

The FIRES seven-step approach

The objective of FIRES was to thoroughly analyse European institutional arrangements and their current (in)ability to mobilise Europe's human, financial and knowledge resources for entrepreneurial activity, in order to help us formulate an approach which would enable us to reinvigorate European economies. This approach is both analytic and prescriptive in nature. Focusing on the institutions governing the creation and allocation of financial, human and knowledge we seek to propose reforms that would enhance entrepreneurship. The key concept around which the FIRES approach evolves is 'entrepreneurial ecosystem' which consists of institutions which enable or inhibit entrepreneurial activity.

FIRES Deliverable 5.12 [2] provides an extensive reform agenda for three country case studies. This Policy Brief builds on this and proposes a general approach towards analysing the entrepreneurial eco-system and pursuing reforms. This Policy Brief introduces the FIRES seven step approach towards analysing, assessing and changing the institutional environment to foster entrepreneurship. Each step is briefly introduced.

Step 1: Assess the most salient features of the institutional complex in place and trace its deep historical roots

FIRES starts from the recognition that national systems of institutional arrangements have evolved historically and create path-dependent effects. Rather than revolutionizing existing institutions we start from the idea of reforming existing institutions. Consequently, proposed reforms have to 'fit' with existing dynamics. FIRES does not advocate emulating or copying and pasting policy from one institutional

[2] Mark Sanders, *Financial and Institutional Reforms for the Entrepreneurial Society: Part I*, submitted on 15 May 2018.

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setting to another without assessing how they might or might not fit in. A first step involves a careful historical analysis of the most important institutional arrangements for entrepreneurial venturing: those that allocate finance, talent and knowledge to new ventures. Hence, for any given institutional ecosystem we first need to understand the historical roots and evolution of the institutional arrangements that are most relevant to entrepreneurial ecosystems and to identify the most important future challenges and opportunities in this respect. This will differ widely from region to region and country to country. Reports of WP 2 (Institutions and Entrepreneurial Ecosystems in Europe: past, present and future') provide tools to perform this historical analysis.

Step 2: Assess the strengths and weaknesses and flag the bottlenecks in the entrepreneurial ecosystem using a structured data analysis (WP4)

A second step is making a detailed analysis of the current strengths and weaknesses of the current entrepreneurial ecosystem. For this purpose, we use the Global Entrepreneurship and Development Indicator (GEDI), developed by Acs and Szerb .[3] The GEDI is a methodological and statistical tool for understanding how *individuals* and *institutions* (entrepreneurial eco-system) interact to create economic growth. GEDI is a so-called composite index which provides summary information about the multi-dimensional concept of entrepreneurial ecosystem. The GEDI index uses a unique 'penalty for bottleneck' methodology. The key principle of this approach lies in the assumption that system performance is determined mainly by the weakest performing variable. The penalty for bottleneck methodology has direct policy relevance as it identifies the weakest links in a country both at an institutional level as well as at an individual level and highlights the changes needed. This results in a multidimensional assessment of the entrepreneurial eco-system. The GEDI index consists of 14 pillars that make up three sub-indices (the Attitudes Sub-Index; the Abilities Sub-index; and the Aspirations Sub-index).[4] In turn, each of the pillars "contains an individual and an institutional variable that corresponds to the micro- and the macro-level aspects of entrepreneurship"[5].

The 14 pillars, as described by the creators of the GEDI index, are the following:[6]

1. ***Opportunity Perception***: "Can the population identify opportunities to start a business and does the institutional environment make it possible to act on those opportunities?"
2. ***Startup Skills***: "Does the population have the skills necessary to start a business based on their own perceptions and the availability of tertiary education?"
3. ***Risk Acceptance***: "Are individuals willing to take the risk of starting a business? Is the environment relatively low risk or do unstable institutions add additional risk to starting a business?"

[3]Zoltan Acs and László Szerb, *The Global Entrepreneurship and Development Index,* Edward Elgar, 2011.

[4] Zoltan Acs and László Szerb, *Extension of GEDI Indicators,* FIRES Deliverable 4.1, 30 March 2016, pp. 10-11.

[5] Zoltán Ács, László Szerb and Ainsly Lloyd, *Global Entrepreneurship Index 2018,* Global Entrepreneurship and Development Institute, , 2017, p. 33.

[6] *Ibid.*, pp. 3 and 4.

4. ***Networking***: "Do entrepreneurs know each other and how geographically concentrated are their networks?"
5. ***Cultural support***: "How does the country view entrepreneurship? Is it easy to choose entrepreneurship or does corruption make entrepreneurship difficult relative to other career paths?"
6. ***Opportunity Startup***: "Are entrepreneurs motivated by opportunity rather than necessity and does governance make the choice to be an entrepreneur easy?"
7. ***Technology Absorption***: "Is the technology sector large and can businesses rapidly absorb new technology?"
8. ***Human Capital***: "Are entrepreneurs highly educated, well trained in business and able to move freely in the labour market?"
9. ***Competition***: "Are entrepreneurs creating unique products and services and able to enter the market with them?"
10. ***Product Innovation***: "Is the country able to develop new products and integrate new technology?"
11. ***Process Innovation***: "Do businesses use new technology and are they able access high quality human capital in STEM fields?"
12. ***High Growth***: "Do businesses intend to grow and have the strategic capacity to achieve this growth?"
13. ***Internationalization***: "Do entrepreneurs want to enter global markets and is the economy complex enough to produce ideas that are valuable globally?"
14. ***Risk Capital***: "Is capital available from both individual and institutional investors?"

Moreover, in order to better understand the impact of entrepreneurship on economic growth we built GEDI/REDI scores into a GMR ('Geographic Macro and Regional') model. [7] GMR models provide the tools to simulate ex-ante and ex-post evaluation of proposed policy interventions. The GEDI/REDI analysis provided a basis to identify the key weaknesses in the entrepreneurial ecosystem, where the GMR analysis allows us to assess how reforms and policy interventions would play out in a regionalized Stochastic, Dynamic General Equilibrium model for Europe.

Step 3: Identify, using careful primary data collection among entrepreneurial individuals what most salient features characterize the start-up process and where entrepreneurs face barriers

In a third step, the FIRES project investigates venture creation processes in three European countries with particularly distinct and representative institutions of Continental European, Anglo-Saxon and Mediterranean economics: namely Germany, the UK, and Italy.

To enable these comparative studies, a dataset was created, which we named 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. In collaboration with national call centres and

[7] Atilla Varga, GMR-Hungary: A Complex Macro-Regional Model for the Analysis of Development Policy Impacts on the Hungarian Economy (No. 2007/4), University of Pécs, Department of Economics and Regional Studies.

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a team of research assistants based at Utrecht University, we conducted a total of 539 interviews with firm founders. 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 for it to be merged with other databases.

Step 4: Map the results of step 2 and 3 onto the menu of possible policy interventions to identify potential interventions for the country or region under investigation

In order to develop policy recommendations that address the weaknesses in the entrepreneurial ecosystem we developed a 'menu' of potential policy recommendations – see list below. [8] From this 'menu', policy recommendations or policy interventions can be adapted to a local context to address weaknesses in the entrepreneurial ecosystem.

1. ***The Rule of Law***: We propose to ratchet up the performance of all Member States on issues related to rule of law, government effectiveness and protection of property rights.
2. ***Patents and Intellectual Property #1:*** To promote the use of knowledge, one could think about the right to infringe upon patents that are not actually commercialized
3. ***Patents and Intellectual Property #2:*** We propose to advocate the possibility to limit the breadth, width and span of patent protection to cover working prototypes and market ready innovations only for a short period of time.
4. ***Patents and Intellectual Property #3:*** We propose to explore the possibility to require patent applicants to set the price for the licence *ex ante* instead of allowing them to negotiate the terms of a licence contract *ex post* when the potential for commercial application is known.
5. ***Patents and Intellectual Property #4:*** Support experiments and pilots currently developed with open source patent registration.
6. ***Taxation in General:*** In general, we propose that tax rates be low, transparent, simple and neutral, and that the effective tax rates remain close to the statutory rates.
7. ***Taxation of Labour Income***: It is preferred to reduce high tax burdens on labour over making subsidies, pension rights and social benefits more conditional on employment status.
8. ***Taxation of Corporate Income #1:*** The Union should strive to reduce and ideally remove the discrepancies in member countries between statutory and effective corporate income tax rates.
9. ***Taxation of Corporate Income #2:*** We propose a complete tax exemption for start-ups up to their 3rd year.
10. ***Taxation of Dividends and Capital Gains***: Complexities should be removed when possible. Instead, countries should aim for

[8] The 'menu' of policy recommendations laid out in the policy brief under Step 4 was sourced from Sanders (FIRES Deliverable 5.12), n. 1 above, Table I.

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dividend and capital gains tax rates with few exceptions and few (opaque) concessionary schemes.

11. ***Taxation of Private Wealth:*** We therefore propose to increase the wealth available for informal entrepreneurial finance by reducing taxes on private wealth, private wealth transfers and inheritance.
12. ***Tax Neutral Treatment of Equity and Debt:*** A quick win would be to make equity investments in start-ups entirely tax exempt. A more involved proposal is to start a program to achieve tax neutrality between debt and equity finance. And one step beyond achieving tax neutrality would be to make equity investments preferred.
13. ***Taxation of Stock Options:*** We should lower the tax on capital gains specifically on stock options and underlying stock in start-ups. Moreover, these should only be taxed when exercised and/or sold, so when gains are realised.
14. ***Private Wealth:*** Our proposal is that in regions where family ties are strong, there should be institutional arrangements that would promote lending from private funds especially from the family to ventures.
15. ***Institutional Investors #1:*** Allow more wealth to accumulate/remain in private hands and make it (fiscally) attractive to invest such wealth in entrepreneurial ventures.
16. ***Institutional Investors #2:*** On an experimental basis, we propose that pension funds and other institutional investors be allowed to invest more in equity in general and in venture capital specifically.
17. ***Banking #1:*** To effectively enable institutional investors to channel responsible shares of their portfolios into portfolios of new ventures, build funds-of-funds to achieve the required scale and diversification.
18. ***Banking #2:*** In the system of bank loan guarantees for start-ups, ensure that (appropriately anonymized) credit decision information is made available publicly.
19. ***Banking #3:*** Increase the mandatory equity ratio in banking gradually to 10-15% to have more skin in the game and allow banks to take on more risk responsibly in their lending portfolios.
20. ***Banking #4:*** A long run reform to force commercial banks return to their traditional intermediation role. A modern way to achieve that result is to introduce central bank digital currency to replace the claim on commercial banks as medium of exchange.
21. ***Angel and Venture Capital #1:*** Stop promoting venture capital with public funding directly. Instead focus on developing private competencies in the field.
22. ***Angel and Venture Capital #2:*** Reduce barriers to the sale, acquisition and IPO of VC-funded start-ups.
23. ***Alternative Finance and Disintermediation #1:*** We propose to implement a light-touch regulatory regime for debt and equity crowd funding.
24. ***Alternative Finance and Disintermediation #2:*** Build a harmonized regulatory framework for peer-to-peer lending throughout the union.

25. ***Alternative Finance and Disintermediation #3:*** The European Investment Bank, as part of its efforts to allocate the Juncker-fund, could experiment with a euro denominated European crowdfunding platform and match successful campaigns with public funds.
26. ***The Organisation of Labour Markets and Social Insurance Systems:*** We propose to make important social insurance benefits "portable"— e.g., by decoupling health insurance — between jobs and between regular employment and self-employment.
27. ***Inclusive Entrepreneurship:*** *F*urther develop entrepreneurship programs targeting groups that are disadvantaged in formal employment, such as youths, women, ethnic minorities and low skilled individuals.
28. ***Employment Protection Legislation #1:*** Coordinated Market Economies (CMEs) can provide a model for Mediterranean Market Economies, which show more similarities to CMEs in many respects than Liberal Market Economies.
29. ***Employment Protection Legislation #2***: Allow for more flexibility in working hours.
30. ***Employment Protection Legislation #3***: Relax the stringency of employment protection legislation for permanent contracts.
31. ***Employment Protection Legislation #4:*** Establish or strengthen training programs to prepare workers for new occupations.
32. ***Confidentiality Agreements and Other Barriers to Mobility #1:*** To promote the mobility of people and their knowledge across firms, we propose to lift the legal enforceability of confidentiality agreements between employers and their employees.
33. ***Confidentiality Agreements and Other Barriers to Mobility #2:*** Consider experimenting with measures such as a guaranteed return to a job after time spent with a start-up and/or a publicly funded "venture creation leave" for people engaged in a firm start up.
34. ***Social Insurance Systems #1:*** Guarantee equal access to welfare state arrangements for all, regardless of tenure in a specific job or labour market status, to make all potential employers compete on a level playing field.
35. ***Social Insurance Systems #2:*** Embracing the principles of flexicurity, we propose to carefully consider the impacts of reforms on young SMEs and not force them to take on high risks and burdens.
36. ***Social Insurance Systems #3:*** To ensure full portability of social security entitlements and put an unconditional floor in the social security system Member States could experiment variations on basic income or negative income tax systems.
37. ***Social Insurance Systems #4:*** Mandatory universal insurance for healthcare costs, old age and disability are necessary, given that adverse selection and behavioural biases are likely to cause underinsurance in these areas when such insurance is made voluntary.
38. ***Regulation of Goods and Services Markets:*** Allow experiments with private actors providing public services in the context of "embedded markets" and learn from these experiments.

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39. ***Product Market Regulation #1:*** Continue to harmonize and liberalise product and services markets in the Union.
40. ***Product Market Regulation #2:*** Excessive barriers to new business formation and new entry should be lifted where possible.
41. ***Regulation of (Public) Services:*** We propose responsible deregulation of (public) services as it promises to open entirely new arenas for private innovation and entrepreneurial venturing.
42. ***Digitalisation #1:*** Invest in an excellent, open access digital infrastructure for European citizens and businesses.
43. ***Digitalisation #2:*** We propose to develop open standards and open regulation for the many digital platforms that emerge to facilitate peer-to-peer and business-to-business trade, services and finance.
44. ***Bankruptcy Law:*** Insolvency regulation should protect inherently healthy and promising ventures and allow for a quick and *ex ante* transparent liquidation of those that are not.
45. ***Knowledge Diffusion after Failure:*** We propose to set up publicly funded "entrepreneurial knowledge observatories" where knowledge accumulated in the entrepreneurial process is collected, curated and freely diffused.
46. ***Knowledge Generation #1:*** Reform the European Blue Card system to include also non-employees and people lacking high formal educational credentials provided they have a plan to support themselves.
47. ***Knowledge Generation #2:*** Abolish nationality, residence and affiliation restrictions and quota in eligibility criteria on basic research grants.
48. ***Knowledge Generation #3:*** Both the EU and its member states should create healthy, well-funded, academic institutions that allow Europe's best and brightest to pursue their research interests.
49. ***R&D:*** We propose to limit R&D subsidies and tax breaks to "new to the market" activities.
50. ***Knowledge Diffusion and Commercialisation #1:*** We propose to expand the funding for Europe's SBIR-programs and reform public procurement rules in that direction.
51. ***Knowledge Diffusion and Commercialisation #2:*** Support international partnerships for innovation on specific innovation challenges.
52. ***Knowledge Diffusion and Commercialisation #3:*** We propose experimenting with a (publicly funded) entrepreneurial leave of absence for R&D workers.
53. ***Knowledge Diffusion and Commercialisation #4:*** We propose to strengthen and facilitate the tradition in many European countries of harbouring innovations, even of a radical kind, inside large firms through intrapreneurship.
54. ***Regional and Industrial Policy:*** Liberalise, where possible, spatial planning regulations to allow endogenous clustering of business activity and avoid planning clusters.
55. ***Creativity in Primary and Secondary Education:*** Push for reforms in primary and secondary education that promote creativity, a willingness to experiment, a tolerance of failure and out-of-the-box thinking.

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56. ***Education in the Entrepreneurial Society #1:*** Promote STEM education, specifically for females, early on and then throughout educational careers.
57. ***Education in the Entrepreneurial Society #2:*** To promote the integration of Europe's knowledge base we propose to make English the (mandatory) second language and promote its instruction in primary and secondary education systems.
58. ***Tertiary Education:*** Invest in high quality tertiary level technical education by attracting excellent teaching staff and students. Strengthen Europe's tradition of strong vocational training at the tertiary level.
59. ***Universities #1:*** We propose to educate the young and bright minds of Europe how to be more entrepreneurial before they make their career choices.
60. ***Universities #2:*** The link between universities and external stakeholders should be strengthened. Specifically, more research grants could require transdisciplinary approaches to innovation challenges.
61. ***Universities #3:*** University faculty must be encouraged to stimulate entrepreneurial initiatives while incentives for university spinoffs are increased.
62. ***Lifelong Learning Strategies #1:*** Develop mentoring programs by and for elderly employees and entrepreneurs.
63. ***Lifelong Learning Strategies #2:*** If policy makers wish to experiment with guaranteed public sector jobs to earn a minimum income, such experiments should be set up in such a way the jobs in young, innovative start-up would easily compete with such guaranteed public sector jobs, both on wage and content.

These interventions are all still formulated relatively generally and certainly do not all fit every context. What they have in common, however, is that, together and individually, they aim to open up closed systems and back the challengers of the status quo in Europe.

Step 5: Assess the proposed policy interventions

The next step confronts analysis and recommendations on the one hand with feasibility on the other hand. In this step, one needs to carefully consider the list of selected proposals under step 4 in light of the historical analysis under step 1 and fit the proposed reforms to the relevant local, regional and national institutional complex in place. In order to perform this step, consultations with relevant stakeholders and experts must be organized. This dialogue might result in a revision of the policy recommendations and proposed reform strategies to better fit already ongoing policy initiatives, local preconditions and available capabilities. The proposals selected from the list presented above, then becomes the starting point of a policy discussion. By following the steps as described above, the resulting tailored strategy is built on sound scientific analysis and starts from interventions that have been founded in academic research. The general direction of the interventions proposed is towards liberalisation and mobilisation of resources across activities, but by carefully considering historical and current political contexts, the FIRES-approach avoids the often advocated one-size-fit-all approaches to policy making.

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Step 6: Identify who should change what in what order for the reform strategy to have the highest chance of success

To implement the proposed reforms and operationalise the institutional reform strategy one needs to give thought to how this strategy can be implemented. This is important in the context of a policy environment which is characterized by multi-level governance. The latter concept has two main implications. First, institutional reform should be pursued on different levels of government in the EU ranging from the level of local and regional authorities to the level of the European Union. Given the wide range of possible reforms one needs to identify which level has which competence to do what. In the first two reports of WP6 FIRES conducted an extensive mapping and analysis of which level of government is competent for which policy area and which policy instruments are available at each level. Secondly, not only governments are relevant in the context of institutional reform but also multiple other actors such as firms, knowledge institutions, organized labour and other civil society actors. Identifying which actor can do what is crucial for implementing a reform strategy. Finally, in that process, it is also crucial to safeguard that the reform strategy is and remains coherent across the policy making levels involved.

Step 7: Experiment, evaluate and learn and return to step 1 for the next iteration

In general, it is very hard to propose "evidence-based" reforms strategies. The transition to a more Entrepreneurial Society in Europe is desirable, necessary and perhaps even inevitable. But it is also unique in history and location. Europe is, unlike the United States, not a unified nation state. And although one would be wise to recognize also within the United States, huge differences persist, in Europe such differences are arguably more deeply historically entrenched and pronounced. Europe's nations have long and distinct histories and developed at least three functional "Varieties of Capitalism" ranging from the Anglo-Saxon Liberal Market Economies of the UK and Ireland, to the Nordic Welfare States of Sweden, Denmark and Finland to the Coordinated Market Economies of Continental Europe to a more centralist Mediterranean model and arguably the Transition Model of the new member states in the East. And within these broad clusters, heterogeneity is large. To then provide an evidence-based reform strategy with any level of confidence and scientific rigor is impossible. But we need not leave it at that conclusion. Instead, we added a seventh step to our process, that stresses the importance of experimentation in policy making. All proposals we have made, have foundations in the academic literature and are based on analytical argumentation, but definitive proof that these interventions will have the desired results in a specific institutional context, cannot be given ex ante. Therefore, careful implementation, iteration and evaluation are generally advised to indeed develop such evidence.

Europe's institutions have evolved iteratively and interactively in the past. To date, perhaps this historical process was more or less accidental and without purpose. And indeed, we want to be very cautious in ambitiously trying to steer that evolution in a given direction in the future. But once we are aware of the process and realize that history

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does not have an inevitable purpose, we can intervene to try and improve matters. This is the essence of what Karl Popper and later George Soros advocated as the “open society”.

An animated presentation of this policy brief is available here.

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