THE POSITION OF DEVELOPMENT AGENCIES ON START-UP COMPANIES' ACCESS TO FINANCE IN RELATIVELY LESS DEVELOPED AREAS

DECEMBER 2018

SUMMARY

With the developments in the technology and IT world, the importance of start-ups, using innovative business methods in the economy is increasing. As a result, countries are trying to create appropriate ecosystems to increase and develop start-ups. The angel investing mechanism has become an important tool in these ecosystems. Angel investors both provide financial support to the start-ups in their most fragile period and contribute their rapid development by sharing their professional work experience and using their network when necessary.

In this study, by bringing entrepreneurs, technoparks, angel investors, universities and public institutions together, a supporter support model proposal that make the direct support of Regional Development Agencies and public institutions more effective, and a model proposal that will convert public money to smart money has been developed.

In the first chapter, the developments in this field in the world and the contribution of angel investment to the enterprise ecosystem are discussed. In the second part, the steps that the Development Agencies can support to the start-ups have been determined, and by proposing the Smart Financing Support model, the preparation, implementation and exit stages have been tried to be revealed with different scenarios. In the third chapter, the possible effects of model implementation on the start-up ecosystem are presented.

Key Words: Start-up, Development Agency, Smart Support Model, Angel Investing

1.INTRODUCTION

Today, the importance of start-up companies, which accelerate technological transformation, change the way of doing business, produce values that will make people's lives easier through innovative approaches and turn these values into economic benefits, is increasing. This new business culture, which began in America in the 2000s and became widespread in the world, started to be seen as an important instrument in economic development. Many developed and developing countries have recognized the importance of the issue and have started to create and support ecosystems that will facilitate start-up companies. In this regard, angel investment mechanism became prominent as one of the most important tools. Angel investors both provide financial support to enterprises in their most fragile start-up phase and provide mentoring services with their experience and business networks.

Research shows that angel investing is not only a financial instrument, but also an important instrument in reducing unemployment. It was calculated that an entrepreneur who received his/her first investment could reach an average employment number of 5 at the end of the first year, and 16.7 at the end of the third year. Angel investing directly contributes to the growth of companies. In an angel-invested initiative, it was found that the average income reached from 700 million Euros to1.8 million Euros in 4 years. (EBAN, 2014)

Studies in this area have been accelerated in recent years in our country and many positive developments have occurred in both public and private sectors. The number of Technology Development Zones (Technopark) throughout the country has started to increase. Thanks to incubation centres in technoparks, appropriate environment and facilities that will mature innovative business

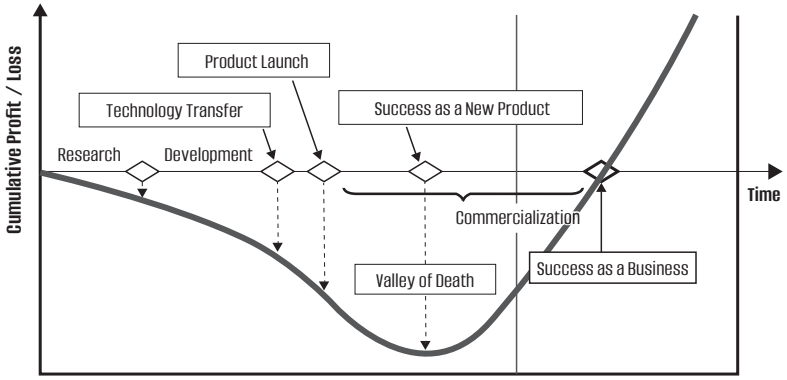
ideas are being created. Several support programs have been presented and implemented with TÜBİTAK and KOSGEB under the Ministry of Industry and Technology in order to provide access to finance for such companies. The private sector also recognized the importance of the issue, and large companies started to implement their own R&D and Innovation activities by supporting the start-up companies in their own centres and incubation centres. Entrepreneurs and investors of a certain size have established networks and started to invest in these companies thanks to angel investment mechanism. Legislative and support infrastructure was developed by the Ministry of Treasury and Finance for the development of these networks and to increase the number of angel investors. As a result of all these studies, ecosystems that provide establishment and support of start-up companies, have developed considerably in the big cities such as Istanbul, Ankara and Izmir. However, it is evident that we need to make more progress when compared to the developed and other developing countries.

Development Agencies have supported approximately 5.6 billion TL with their financial support programs. These supports can be used directly by investors as grant. These supports has a certain positive effect. However, in order to increase the effectiveness of the support provided by the Agency and other public institutions, instead of supporting the investors directly, public funds should be converted into smart money by supporting the supporters. The most suitable tool for this model is angel investing. During the realization of the business idea, the support and useful outputs are from angel investors rather than the spouse, family, friend and venture capital. In this study, in order to accelerate the formation of these ecosystems, new model proposal that converts public money to smart money has been discussed.

2.DETERMINATION OF THE PHASE OF AGENCY SUPPORT TO STARTUPS

When we look at the life cycle of a business in operational sense, we see a graph as follows.

Figure 1. Business Life Cycle

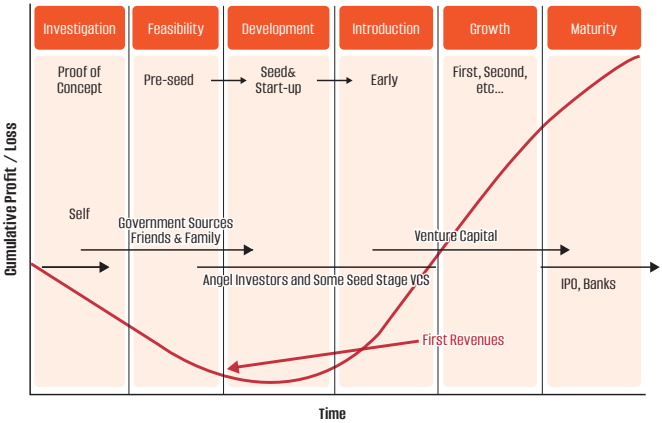


Source: Osawa and Miyazaki, 2006.

Companies may carry out their research and development activities by working with their own R&D Centers or R&D staff or by working with universities and Research Centers. In recent years, especially large firms establish their own incubator center and carry out their R&D activities by supporting Startup companies which working in this incubator center. As seen on the Figure 1, the valley of death is the region is where companies spend most of their time and where need for finance is most critical when launching a new product. Companies with sufficient financial and human source are able to overcome this region easily and stand out as inovative companies and many companies have difficulties in this area. In many countries and in our country, support mechanisms have been established to facilitate the transition to this region in order to make it easier for companies to be more innovative and competitive.

A similar graph will also be seen in the business life cycle of start-up companies. Figure 2 shows the people, institutions and structures which give support to start-up companies about access to finance and transition process from business idea to a sucessful business model.

Figure 2. Business Life Cycle of Startups

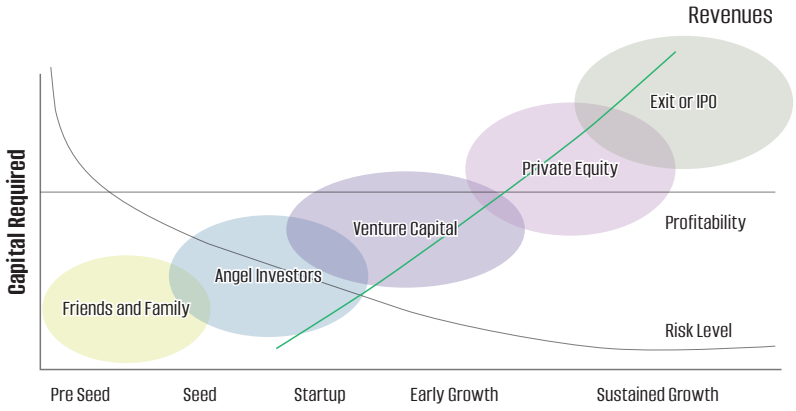


Source: C. Stamp Johnson, 2018.

As seen in Figure 2, the most risky region is the 3rd region that is establishment phase of company and comes after the research and feasibility phases and also this is the region where startup companies have the most difficulty in converting their business ideas into a successful business model. After overcome this region, the chances of success of companies and possibility of access to finance increase.

In the stage of passing this region some financial supports are given by TÜBİTAK (BİGG Program etc.) and KOSGEB (Entrepreneurship Support Program). Beside these supports, business angels invest to startup companies in this risky region and aiming to exit in the 5th and 6th regions. And they play very important role in the realization of innovative business ideas. Figure 3 shows the angel investment funding steps of startup companies and risk levels.

Figure 3. Financing Steps



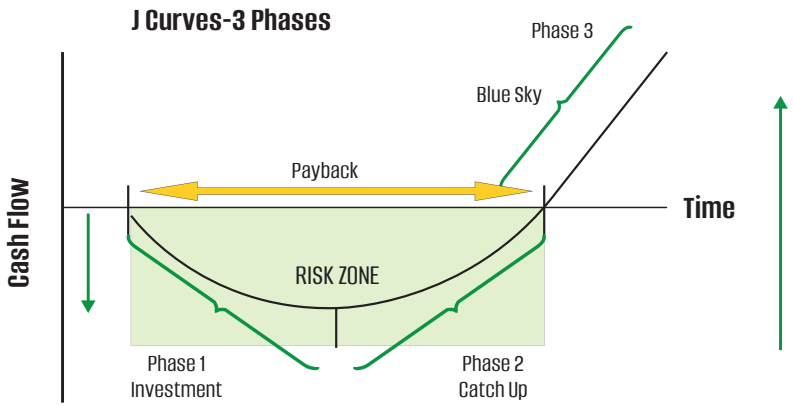
Source: Ourcrowd, 2015.

Beside financial support, business angels offer their experiences and business contacts to startup companies through mentoring and thus a more intelligent and value added support model comes into life. For this reason, Business Angels and Business Angels Networks have started to be seen as an important chain of startup ecosystem in our country and in many countries in recent years. In this regard, support systems to encourage Angel Investments have been developed with legislative arrangements.

A number of steps have been taken also in our country in this area and the legislative arrangement related to the Individual Participation Capital System have been made by the Ministry of Treasury and Finance. Business Angels Networks have started to be established and they start to invest in startup companies. There are currently 14 accredited Business Angels Networks, 10 of them operate in Istanbul and others in Anatolia. However, considering the potential and size of our country, these numbers are quite insufficient. In particular, the problem of not becoming widespread in provinces other than Istanbul is also aimed to be eliminated with this model.

As seen in Figure 4, one of the main problems facing this development is that Business Angels are investing in the most risky phase in the process of development of startup companies. They do this because, although the risks are high, the company valuation is low and if the business is successful, the profit is higher in proportion to the risk (Phase1).

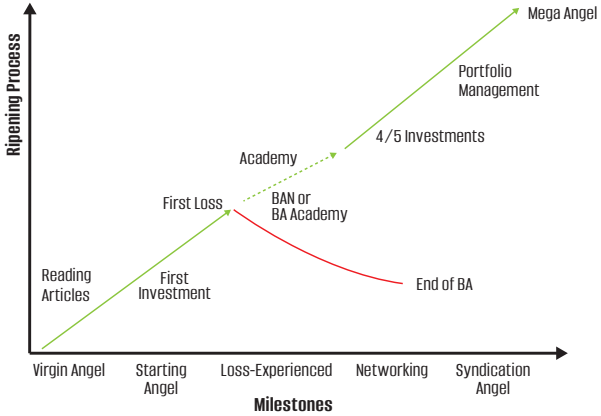
Figure 4. J Curve



Source: Realtime CEO, 2014.

As highlighted, risks are high at this phase and a business angel is expected to have the ability to manage these risks. Making investments by creating a portfolio according a specific strategy and having an exit plan stand out as the other elements that bring success on this issue. For these reasons, it takes some time for a business angel to start this business and start making professional investments.

Figure 5. Development Process of Angel Investors



Source: Aernoudt Rudy, 2005.

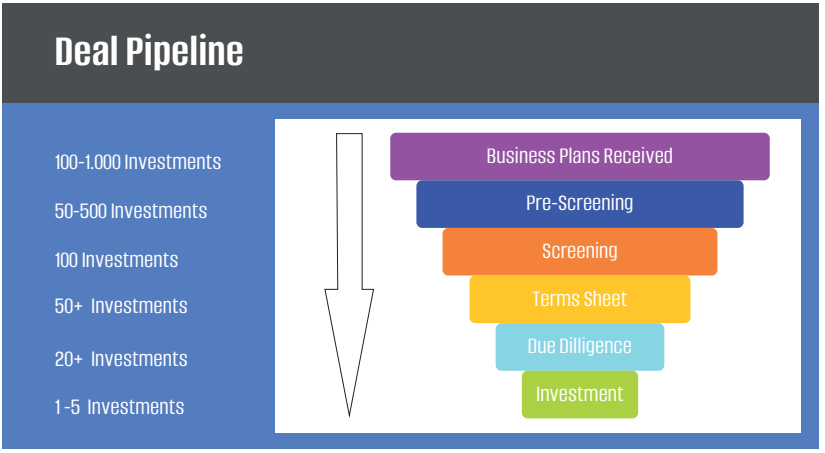
Development Process of an Angel Investors is shown in figure 5. It is assessed that especially completing trainings before starting angel investment will accelerate this process and create solid foundations. Due to its nature Angel Investing is a topic which requires focusing and labor.

In the case that all these processes are carried out successfully, the return duration of the investments made to the startups vary between 5 and 8 years. In recent years, a partial increase has occurred in this period.

For the investments made to startups, the main exit target is to depart at least with return of 10 times of the initial investment. However, statistically this rate is around 7%. In this respect, only 1 out of every 10 investments can achieve this goal. Average 2.6 times of the initial investment is returned in 3.5 years. Internal efficiency rate is 27%, higher than other Private Equity investments. Exit point from Approximately 48% of the investments are at least at break even. In 52% of the exits, output is less than the first investment.

For all these reasons, Angel Investors are highly selective in investing startups. The number of startup investments supported by such a value-added investment model is quite low. This is clearly seen in Figure 6, which represents the worldwide statistical situation. Only 1 to 5 out of approximately 100 to 1000 work plans which are evaluated can get investment.

Figure 6. Support Process of Business Ideas



Source: WBAF, 2018.

In order to increase the number of startup investments supported by Angel Investing, which is stated as the most value-added and intelligent investment system in the light of all these studies and statistical information, it is necessary to increase the number of Angel Investors and the number of startups that these angels can invest in. The number of angel investments and startup companies is insufficient especially in the provinces where entrepreneurship ecosystem is developed such as Istanbul, Ankara and İzmir. In relatively less developed cities ecosystem occurrence is at the beginning stage.

While this system in the developed regions continues its progress with the private sector dynamics, the initial progress in this area can be accelerated with the support models that the Regional Development

Agencies will develop with the relevant stakeholders in the relatively underdeveloped regions. Thus, a model could be developed to increase the number of startup companies, which are seen as the dynamics of economic development, in the whole country and with a support mechanism that will be provided at an early stage and to provide support by reducing the risks of both local and national and international Angel Investors.

The reason why this process is expected to be carried out through Agencies can be expressed as the ability of Agencies to implement support programs according to their regional development needs. Such programs can be carried out in cooperation with the Regional Development Administrations. National Plans and strategies are taken into consideration in the preparation of these studies and attention is paid to ensure that the programs comply with national policies.

It is considered that the preparation and implementation of support programs in accordance with the differentiated needs and potentials of cities and regions will contribute positively to the efforts to achieve national development goals.

Based on all these issues, the model proposals that will contribute to the investment of Angel Investors in Startup companies and to support the companies in the initial phase in our region, are given below.

Model-1 Smart Financing Support Model (So Smart Support (3S) Model)

With this support model, it is aimed to establish an intelligent support mechanism by incorporating Angel Investors into the system as different from the support provided by institutions such as TÜBİTAK and KOSGEB in the scope of entrepreneurship.

As support programs can be designed according to regional priorities through Development Agencies, it will be easier to make startup investments on thematic issues. In this way, both the startup companies will be supported, and via reduction of risks it will be easier to invest in by Angel Investors.

Agencies can provide grants, loans or interest-free loans to enterprises within the framework of the Project and Activity Support Regulation. In this model, the way in which support is provided is set up as a shareholding instead of a grant. It is aimed as much as possible early exit from the investments made. A model designed to reinvest the financial returns to new startup companies and aimed a cyclical growth as a result.

In the current Agency legislation, Agencies cannot become shareholder directly with the companies, so it is needed to have a suitable intermediate organization to operate this system. If this intermediate organization could be an institution that can support the ecosystem and that it can provide opportunities and supports to Startup companies except the Agency support will make this model smarter. Therefore, the name of this model is determined as Smart Financing Support Model (So Smart Support Model (3S)). The structure that can meet all these expectations is considered as Technology Development Zones (Technopark). Technology Development Zones management system has a suitable corporate structure for commercial shareholding because it is structured as Joint Stock Company. Since they can accommodate pre-incubation and hatchery centers, they can offer mentoring, consultancy services and provide a suitable environment for entrepreneurs to exit. In addition, special incentives are given to firms established in technoparks and some exemptions are granted. With structures like Patent, Trademark Office and TTO, it can transfer technology and can provide support for intellectual property rights. Starting from these points, both the technology development region and the angel investor are becoming shareholders in a firm gives support a Very Smart (So Smart) feature.

The main task of the Technology Development Zone in the model to be shareholder of Startup with the support of agency to reduce the risk of the angel investor and thus facilitate the investment. If the process goes as desired and the project is successful, the exit will be as early as possible without profit.

Another important actor that will make the system smart by including the angel investment process in the support mechanism will be the Regional Angel Investment Network that established under the leadership of the agency. The main mission of this network is to identify entrepreneurs with business ideas, to introduce the system to these entrepreneurs, to bring entrepreneurs together with angel investors and to increase the number of angel investors in the region.

In this context, training activities, seminars and conferences, communication and collaboration with other networks, monitoring of the agreements between angel investors and the projects that are eligible to be granted, to make processes easier via supporting processes like due diligence etc., to coordinate joint investments, in order to facilitate the exit from the projects in the next development phase, implementing cooperation with the venture capital and private equity mechanisms etc. studies will be carries out through network. A local angel investment network will contribute to the investment of other national and international angel investment networks in the region.

To sum up, the support model is aimed to bring together all relevant actors in the ecosystem (Startup companies, Technoparks and Universities, Agencies and Public Administrations, Angel Investors and Angel Investment Networks) and to increase the added value of the system through the synergy that it will create.

It is necessary to underline that the role of Development Agencies in this process is critical. Accelerating the establishment process of the Regional Angel Investment Network, transforming this system into a program in line with the regional priorities within the framework of the support model, transferring resources and monitoring and evaluating the supported projects are among the important works of the Agency. In addition to these, facilitating the investments with smart support system, creating and implementing support programs that encourage the formation of pre-incubation in the region to increase the number of startups in the region, ensuring the development of support mechanism in the light of the experience gained after the implementation of the

program and strengthening a kind of governance among all ecosystems including central institutions also will be done by the Agencies.

The processes for implementing the model are detailed below.

Phase-1 Preparations for Regulation of Legislation and Design of Support Program

As mentioned, Development Agencies consider the sectoral priorities of their regions when designing programs. Again, only the potential beneficiaries in their region can apply to the designed programs. Therefore, although the Regional Angel Investment Network will act with a wider upper regional scale above Agency regions, the support program needs to be set up according to each Agency's regional priority. Therefore, in the first place, priorities, budget, support method etc. topics will be determined and transformed into a program. However, since there is no legislation to allow Agencies to support the angel investment network, a legislative regulation will be needed in this regard. If legislation regulation would not be possible, alternatives can be put into action by agencies such as transferring resources to the Technoparks with a protocol and conducting the process or implementing the program as a guided project.

The budget of the program can be created not only by the Agencies but also with the contribution of the Regional Development Administrations or Central Institutions. For the first year, it is aimed to direct a resource of approximately 2 million TL to this support program.

After this process becomes clear, the program will be concretized and the call for proposals will be initiated.

Phase-2 Program Call for Proposals

The first phase of support program will be preparation of a competition that the entrepreneurs in the pre-incubation, incubation and startup stages will interview and present their business ideas to angel investors. All the processes related to the competition will be clarified with the relevant institutions in the ecosystem and the competition will

be announced. The national and regional launch of this competition program and its promotions will be covered by the Agency Budget.

Phase-3 Preliminary Evaluation of All Inbound Business Plans

The entrepreneurs will present their business plans to the collaborated Technology Development Zone after the announcement of the competition. In the scope of the call open to all national and international entrepreneurs, the applications will be examined with a technical team which will be formed within the Technopark, in terms of administrative and technical aspects, and a preliminary evaluation will be made. Technical assistance will be provided on the evaluation criteria, points to be considered and form drafts from international organizations such as the World Angel Investment Forum that experienced in this field in this context

As a result of the preliminary evaluation, the first 25% of the ideas will be awarded to the second stage.

Phase-4 Evaluation of the Arbitration Court

Entrepreneurs who qualify for this stage will prepare a maximum 10-minute presentation including business ideas, business models, opportunities brought by this business idea or model, return on investment and exit strategies and will submit it to the arbitration court. The arbitration court shall be composed of at least 1 experienced Angel Investor, 1 Development Agency Representative, 1 Small and Medium Enterprises Development Organization (KOSGEB) Representative, 1 Technology Development Zone Officer and 1 University Lecturer. The first 25% business idea (or at least 20 ideas) that the arbitration court found to be successful will be awarded to match with Angel Investors.

Phase-5 Entrepreneur-Angel Investor Meeting

A program will be held to bring together entrepreneurs awarded to this stage with Angel investors who are members of the Regional Angel Investment Network and angel investors to be invited from national and international other angel investment networks. Entrepreneurs will pres-

ent their projects in a total of 15 minutes, including 7 minutes of presentation to the angel investors and 8 minutes to the question and answer part within the scope of this activities.

Intelligent Support Applications will be designed and all details will be explained to angel investors at this stage so angel investors will make it easier for entrepreneurs to invest.

Implementation of Smart Finance Support (3S) Model

After the presentations, if the Angel Investor approve the business idea, moves the Due Diligence (investigation of the accuracy of the idea and the market) step and decides to invest, the amount of the support of the Angel Investor and 50 % of the share proportion (max 200 Thousand TL) will be transferred by Development Agency. This support will be transferred to the company as the share fund of the Angel Investor through the budget transferred to Technology Development Zone. The establishment of the company in the Agency region will be one of the main requirements of the support.

With this support, the Angel Investor's risk will be reduced and the chance of investment success will be increased. Besides the support of the Agency, The Technology Development Zone, will support the partnership with a mentor that has an R&D certificate from the university and will support with free workshop, patent and trademark application for 1 year. When the support of the Agency and Technopark will be integrated, the program will become So Smart.

After the presentations, the entrepreneurs who are not decided to be invested by Angel Investors will also benefit from the support provided by Technopark through mentoring, workshop, brand and patent. In addition, the rest of the transferred resources will be used for the companies who reached the last step but are not able to get investment. This resource will be used for each company to be a shareholder not more than 30 %. Moreover, the non-invested business ideas will be matched with Angel Investors that are in the Angel Investment Network and are active in the region. If there are not enough Angel Investor, they will

also be matched with the ones who want to be Angel Investor to get their mentoring. Technopark will invest in these investors, but Angel Investors will gain experience through matching.

The Technology Development Zone will have a representative on the board of directors of the companies but will not be involved in decision-making processes except in financial topics. This will also contribute to the monitoring and evaluation of the support.

As a result of all these efforts, at least 10 investments are expected to be realized.

EXIT STRATEGY

a. Exit Strategy in the Case of Things Go Well

Technology Development Zone as a nonprofit organization involved in giving support, making the support smarter. For this reason, if the company was established and started to work and things go well after 1 year, Technopark will offer to transfer the shares of the company to the Angel Investor and the Entrepreneur on the first day value. If the offer is accepted, the exit will be realized. The financial resources from these exits will remain in the budget of the Technopark with the condition of re-use in the system (compensation of new investments and losses, mentoring services, etc.).

Technology Development Zone will firstly offer its shares to the Mentors on the first day's price at the end of one year, if things go well in investments made by Technology Development Zone. The shares of the Technology Development Zone will be transferred to the mentors, provided that the mentors agree to be an angel investor and to be included in the network. If the mentors are already angel investors, the shares will be offered unconditionally. In case the mentors do not accept it (if things go well, it is thought that they will accept) the transfer proposal will be presented to the other investors in the Angel Investment Network. When there is no return from Angel Investors, the shares will be transferred to start-up company by 50 % of the initial value and the exit will be made. A two-year payment plan will be made to make it easier for start-up to take over this 50 % low-value share. This will be detailed in the preliminary contracts.

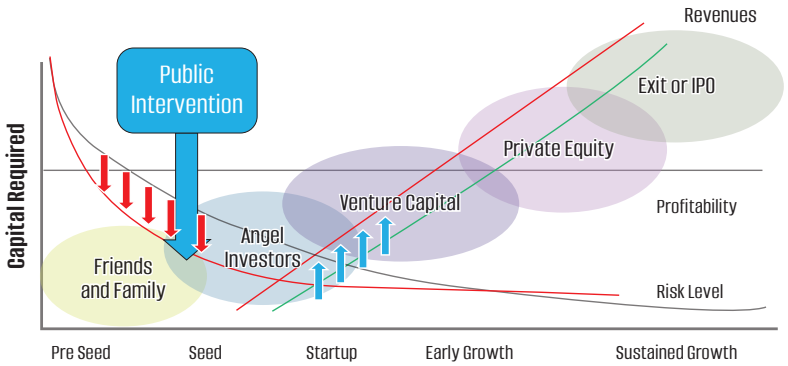
b. Exit Strategy in the Case of Things not Go Well

In the case that the investments made by the Technology Development Zone Company and the Angel Investor or investors together do not meet the expectations at the end of 1 year, an additional one year process will be executed and in case of not succeeding at the end of the 2nd year, the shares will be distributed equally to start-up and Angel Investor without demanding any cost and exit will be made.

The same process will be executed if the investments of the Technology Development Zone Company alone are also unsuccessful.

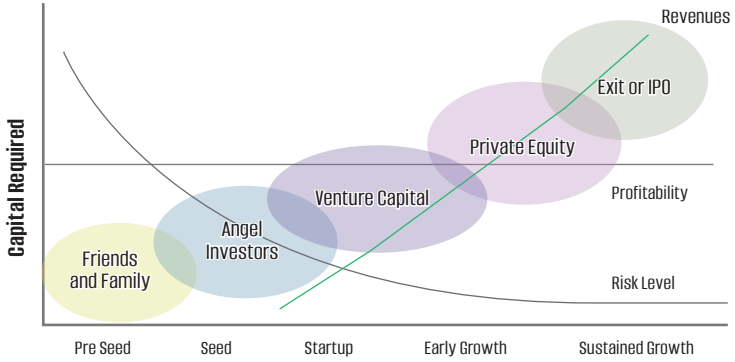
3. RESULT

Figure: 7. Smart Financial Support Model (3S) And Post-Financing Steps



Source: Ourcrowd, 2015.

Figure 8. Smart Financial Support Model (3S) And Post-Financing Steps



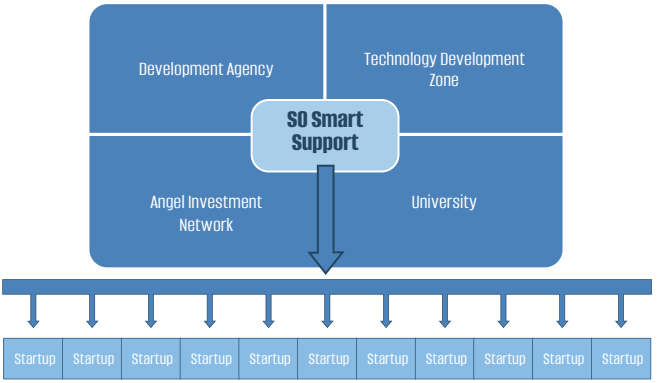
Source: Karacadağ Kalkınma Ajansı, 2018.

By investing in the angel investors with this support model, for both angel investors and the startup firms the level of risks will be decreased, yat the income expectancy will be increased. The figure shows the public intervention area at the point of intersection, as shown in figures 7 and 8.

In addition, the current Angel investors will be able to invest 2 times more in entrepreneurs with the amount of funds they will be allocated for investment with 50% financial support to be given within the scope of this model and the support volume will be increased. For example, an angel investor with an investment fund of 100 thousand TL will invest 50 thousand TL in 2 entrepreneurs instead of investing 100 thousand TL in an entrepreneur and a total investment of 200 thousand TL will be made to two entrepreneurs. Thanks to this system, the institutional capacity of the Technology Development Zones for fund raising and management will be improved rapidly.

By courtesy of this capacity, both national and international institutions and organizations (Treasury and Finance Ministry, TUBITAK, EU etc.) which provide co-financing regional cooperation's can be made. With these funds, entrepreneurs will be provided with a fund mechanism that will provide leverage effect up to 16 times.

Figure 9. Smart Financial Support Model (So Smart Support Model (3S))



Source: Karacadağ Kalkınma Ajansı, 2018.

For this model to be implemented in a healthy way, the Ministry of Treasury and Finance and WBAF will be consulted and the model will be finalized from the active actors

This model, which will be implemented together with the main actors, is expected to contribute greatly to the development of the ecosystem.

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