

August 2017**Specialised in Growth**

Ladies and gentlemen,



Foto: schreier.co

As an investor with a focus on expansion financing, we are very pleased with the development of our portfolio companies in the past few months. EIT has received FDA approval for its 3D-printed spinal implants and can

now start marketing in the US.

Tyromotion is also on course for continued growth. The Austrian company has gained a major distribution partner for its activities in the US. This also indicates an important trend in the medical technology industry: robotics. We think this trend is just getting started, but its dynamic nature can be seen in Tyromotion's growth.

The German election is imminent. Have a look at the final part of our election check. In this series, we have asked representatives of the various parties to provide us with information on their views pertaining to medical technology and growth capital.

I hope you enjoy reading and I look forward to your feedback.

Hubertus Leonhardt

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ARTICLES

The 2017 German election: venture capital as an opportunity for Germany’s innovative strength?

The German economic model is known for its efficiency, but rarely produces truly disruptive technologies. Medium-sized companies and large corporations have found it difficult to radically transform their business models to fully profit from the potential of new technologies. It is therefore all the more important that young innovative companies have access to financing. The following section provides insight into whether the German political parties have recognized this issue as a problem and what measures they intend to take to address it:

SHS Gesellschaft für Beteiligungsmanagement:

In relation to the gross domestic product, only a fraction of earnings is invested as risk capital in Germany as compared to some other countries.

- a. Do you see this as a problem?
- b. If so, what measures do you intend to implement in the next legislative period to deal with this?

Many parties have already planned a venture capital act for the current legislative period. No comprehensive law, however, has been decided on in this area to date.

- a. Are you planning a private equity or venture capital act for the coming legislative period?
- b. If so, which topics and problems do you think it should primarily address?



Christian Democratic Union (CDU):

The CDU federal committee (BFA) for finances, economy and energy drafted a resolution at the beginning of November 2016 to improve investment options for retirement provisions. This resolution addresses issues that can have a positive impact on company financing. Amongst other things, these include the following:

- Checking the level of guarantee: although guarantees are costly, they have proven to be one of the biggest incentives when it comes to deciding on an investment. Pensions, in particular, are so focused on investment security that they can hardly offer any returns. We would therefore like to determine which criteria have to be met to gain acceptance for products with a lower level of guarantee, but a wider range of investment options and the prospect of higher returns. One requirement is that they can be used to build up capital-funded retirement provisions more easily and yet with moderation.
- Holding cash and cash equivalents: we will be looking at ways to reduce the holding of cash and cash equivalents. This includes defining minimum holding periods for eight to twelve years for government-sponsored products, for example.
- Fund solutions for investment in venture capital: investments in venture capital companies are often not suitable for securely and continuously generating guarantee commitments. Reasons for this include the high costs of monitoring the investment, a high administrative effort and unstable capital flows in the initial years. Investment funds could provide a solution. We will be looking into the precise conditions required for this as well as other options for improving the combination of retirement plans and investments in companies.
- We need to have standardized procedures to implement future-oriented and sustainable infrastructure investments quickly and easily. The insurance industry has expanded investment in infrastructure considerably. The potential, however, is far from exhausted. For this, investors require greater planning and legal certainty. Pooling projects for a certain period of time can provide stable returns early on. And pooling projects based on the required expertise can serve to reduce the problem of lacking know-how.
- Creating an online infrastructure platform, on which companies could compete for providers of capital, would be one suitable solution to this. Public-sector organizations would be tasked with initial sighting and bundling of the

projects, as well as defining standards. We will be discussing what conditions are necessary for this and how such platforms can best be designed. Aspects such as the size of the projects including meaningful division or pooling, risk diversification, and the necessary database functions of a platform are of importance here. The capacities required by the public sector for such a platform and leadership issues also have to be clarified.

THE GREEN PARTY (DIE GRÜNEN):

In relation to the gross domestic product, only a fraction of earnings is invested as risk capital in Germany as compared to some other countries.

a. Do you see this as a problem?

b. If so, what measures do you intend to implement in the next legislative period to deal with this?

SMBs and founders are important drivers for ecological and social innovations. Better funding opportunities are required to support them. Access to equity financing, however, often represents a problem for innovative fast-growing SMBs, which is why we support the establishment of venture capitalists.

To increase the VC offering, we are examining how investment guidelines for long-term investment products can be changed to allow part of the funds of these to be diversified in VC. The tax disadvantages of equity financing should also be eliminated. We also think it would make sense to use the development banks as anchor investors.

To increase the demand for VC, we primarily intend to support measures that directly promote the establishment and development activities of innovative SMBs (see next question).

Many parties have already planned a venture capital act for the current legislative period. No comprehensive law, however, has been decided on in this area to date.

a. Are you planning a private equity or venture capital act for the coming legislative period?

b. If so, which topics and problems do you think it should primarily address?

We want to support venture capital in a targeted way. We consider it as a priority to promote entrepreneurs and innovative SMBs, because the provision of venture capital is only of limited use without this. We see a need for improvement in many areas in this regard. Specifically, we support reducing the bureaucracy for start-ups (one-stop shops), better protection and promotion of self-employment, tax-based research funding for SMBs, an increased budget for project funding, etc.

Strengthening company equity remains an important objective. We therefore want to eliminate preferential tax treatment of debt capital over equity capital, which would serve to make financing through venture capital more attractive.

THE LEFT PARTY (DIE LINKE.):

In relation to the gross domestic product, only a fraction of earnings is invested as risk capital in Germany as compared to some other countries.

a. Do you see this as a problem?

b. If so, what measures do you intend to implement in the next legislative period to deal with this?

The basic problem of the German economy and thus our society as a whole (jobs, technological progress, prosperity, sustainable development) lies in the generally weak development of both private and public investment, whether in machinery, equipment and new products, or in education and infrastructure. One of the main reasons for this consists of the dismantling of governmental structures and weak wage development. The latter largely determines domestic consumption and thus the capacity utilization rate in the industrial segment, sustained growth and employment. Die LINKE. calls for more public investment to ensure better education, an effective social and economic infrastructure and sustained growth. In such an environment, more people would certainly be willing to invest their money in private venture capital to advance the development of new sustainable production methods and products, for example.

Many parties have already planned a venture capital act for the current legislative period. No comprehensive law, however, has been decided on in this area to date.

a. Are you planning a private equity or venture capital act for the coming legislative period?

No.

FREE DEMOCRATIC PARTY (FDP):

In relation to the gross domestic product, only a fraction of earnings is invested as risk capital in Germany as compared to some other countries.

a. Do you see this as a problem?

Yes. The share of invested risk capital in relation to the gross domestic product (GDP) in Germany is about 0.03 percent. As such, Germany lags far behind other countries like the US and Israel, where ten to twenty times as much is invested in risk capital in relation to the countries' economic strength. We do not want the many innovative ideas that arise in this country to be further developed in the foreign markets and turned into successful products and services there due to a lack of sufficient funding at home. We therefore need more risk capital. Otherwise, Germany will fall behind its global competitors.

b. If so, what measures do you intend to implement in the next legislative period to deal with this?

We want to make Germany into a modern venture capital location. Of primary importance to us in this regard is a venture capital act, which creates competitive conditions for venture capital especially with regard to taxation. We want to improve the framework conditions for venture capital investments for investors.

Many parties have already planned a venture capital act for the current legislative period. No comprehensive law, however, has been decided on in this area to date.

a. Are you planning a private equity or venture capital act for the coming legislative period?

Yes.

b. If so, which topics and problems do you think it should primarily address?

We want a venture capital act, which comprehensively and holistically creates the best conditions for venture capital in Germany. We see as crucial with regard to taxation laws the elimination of taxes on capital, allowing for loss deduction in case of changes to share ownership, transparent taxation for venture capital companies and fair taxation of investors who sell their investments.

SOCIAL DEMOCRATIC PARTY (SPD):

In relation to the gross domestic product, only a fraction of earnings is invested as risk capital in Germany as compared to some other countries.

a. Do you see this as a problem?

b. If so, what measures do you intend to implement in the next legislative period to deal with this?

The willingness to invest is too low in our country. We have been warning of this for a long time now. This applies to all forms of investment including risk capital. We not only want to stimulate public investment, but also investments in seed and venture capital. We also want to provide incentives for investment and stimulate new growth. The measures are mentioned in the answer below.

Many parties have already planned a venture capital act for the current legislative period. No comprehensive law, however, has been decided on in this area to date.

a. Are you planning a private equity or venture capital act for the coming legislative period?

b. If so, which topics and problems do you think it should primarily address?

We welcome the debate regarding a venture capital act in Germany. Internationally competitive conditions are crucial, especially for high-tech start-ups in the growth phase. Young companies in the digital and high-tech segment do not have sufficient equity for their product ideas. Money for growth is lacking, especially in the phase following a successful launch. We want to improve the framework conditions to be able to succeed in international competition.

Germany is in urgent need of a change in mentality toward an increased willingness to take risks and engage in business endeavors. We are increasingly seeing good ideas not being able to be brought to fruition in Germany because they can't be financed here. Germany is behind in international comparisons when it comes to private financing of companies. We will only be able to maintain our prosperity in the long term if we can catch up in this regard. This is also important to provide employment opportunities in the rapidly changing digital economy.

With the law for further development of tax loss allocation for corporations passed on 30.11.2016, the first steps were made toward a venture capital act. The financing conditions for start-ups in Germany are improving. The SPD group in the Bundestag had already demanded over a year ago, that losses carried forward for young innovative start-ups no longer be disregarded in the case of a change in ownership. We have achieved this goal with the new act. But this won't be enough. We are aware of the fact that venture capital is required to finance the growth of innovative start-ups and we want to improve the conditions. To realize larger projects, we want to more tightly integrate financing instruments for start-up and innovation funding more closely with crowdfunding. Better framework conditions for venture capital are, without a doubt, necessary. Unfortunately, we were not able to achieve more with our current coalition partner. Now it is important to consistently continue working toward a suitable law. The law will be a topic for the Bundestag election in 2017 and, after that, it will be important to implement it.

PORTFOLIO COMPANIES NEWS

Tyromotion enters distribution agreement with Enable Me



DIEGO – Tyromotion's versatile arm-shoulder rehabilitation device

As part of an international expansion strategy, Tyromotion has entered a distribution agreement with the US provider of specialized rehabilitation technology Enable Me. In this way, Tyromotion is planning to intensify its activities in the US market, which offers great potential in the area of rehabilitation.

Enable Me has many years of experience in the area of rehabilitation technology and attaches great importance to the needs of its customers. The partnership is intended to help Tyromotion expand its customer base and further develop its business in the US. Enable Me's objective consists of making significant progress in the field of non-surgical treatment directly available to patients. Thus, the company contributes to improving the quality of life of patients suffering from neurological diseases or injuries.

Tyromotion is a manufacturer and distributor of robot and computer assisted rehabilitation devices, especially for stroke patients. SHS has held shares in the company since 2016.

KEY FACTS

Year established: 2007

Business purpose: Development and distribution of robot-assisted and computer-assisted therapeutic devices for the rehabilitation sector, primarily for stroke patients

Products: Amadeo finger-hand-therapy, Diego arm-rehabilitation, Myro interactive therapy, Pablo hand-arm-Rehabilitation, Tymo therapy board

Location: Graz (A)

Expansion in the US-Market: EIT receives FDA-approval for 3D-printed spinal implants

The 3D printing specialist EIT has successfully realized its expansion plans in the US market. Following FDA approval of its EIT Cellular Titanium implants, EIT will soon be able to start marketing its products. This is a major milestone for the Tuttlingen-based company, which will kick-off its penetration of the attractive US market and enable cooperation with leading surgeons and institutions.

The implants are already used for treatment in over 15 countries including Germany, France, Korea and Australia. What makes EIT's products unique is that they are manufactured using an additive manufacturing process (3D printing). The technology used for this allows for the creation of highly porous structures at the macro, micro and nano levels, which very closely resembles natural bone material, thus more quickly and intensively stimulating bone formation. This results in more versatile and anatomically shaped spinal implants with enhanced functionality. SHS invested in the company in 2016.



Spinal implants made by EIT for vertebral fusion made of 3D printed titanium

KEY FACTS

Year established: 2014

Business purpose: Development and marketing of 3D printed fusion implants and instruments for spinal surgery applications. External implant production based on selective laser melting (SLM 3D printing) and regional distribution cooperations.

Products: Cervical cage, lumbar cages as well as an innovation portfolio comprising minimal-invasive access, customizability and other spine innovation projects.

Standort: Wurmlingen (2016, D), established in Tuttlingen (D)

Important milestone for numares: breakthrough in non-invasive bladder cancer diagnostics



The numares AXINON® lipoFIT® test system

In April, the Regensburg based diagnostics company numares announced the launch of its non-invasive renal-allograft rejection test renalTX-SCORE. Now numares has reached an important milestone in the development of a non-invasive bladder cancer test. The results of a retrospective study suggest that metabolomic biomarker networks can be used for the test. As an alternative to risky and often painful cystoscopy procedures, the test for the AXINON lab system developed by numares is to be launched in Europe as a CE marked in vitro diagnostic medical device (IVD) at the end of 2018.

Following market launch, the bladder cancer test would be the second IVD product in addition to renalTX-SCORE, which is based on metabolomic networks. Both tests demonstrate the tremendous potential of metabolomic networks for a new type of in-vitro diagnostics. SHS has held a majority share in numares since 2009. The detailed press release is available [here](#).

KEY FACTS

Year established: 2004

Business purpose: Development and marketing of new analytic and diagnostic tests based on nuclear magnetic resonance (NMR) spectroscopy and specific evaluation algorithms

Produkte: Diagnostic tests for detection of diseases (oncology, cardiovascular diseases, nephrology and neurology)

Locations: Regensburg, Richmond, Boston and Singapur (USA)

Bavarian Minister of Economic Affairs visits AMW

The Bavarian Minister of Economic Affairs, Ilse Aigner, visited the SHS investment AMW in Warngau and the new production facilities for the medicines AMW produces. A guided tour by the company's Managing Director, Wilfried Fischer, helped her become better acquainted with AMW's products and she was noticeably impressed. "Pearls like this often go unnoticed", said Aigner of the company after her visit.

AMW GmbH develops and produces drug patches and implants, providing treatment solutions in the areas of oncology, neurology, psychiatry, pain therapy, contraception and diabetes, all of which are experiencing strong growth worldwide. The company serves a fast growing and highly dynamic segment of the global pharmaceutical market with its drug-delivery systems. AMW has been part of the SHS portfolio since 2008.



Ilse Aigner (right) visits AMW's production facilities in Warngau

KEY FACTS

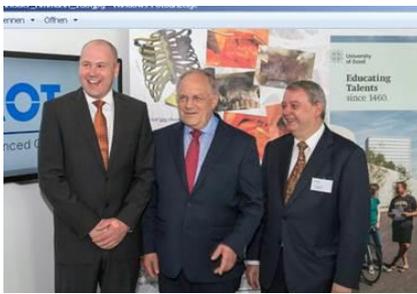
Year established: 2008

Business purpose: Development, production and marketing / out-licensing of specialty pharmaceuticals.

Products: Transdermal systems (drug patches) and active implants for medical applications in oncology, neurology, psychiatry and endocrinology.

Location: Warngau

Federal Councillor Schneider-Ammann visits AOT



From left to right: Cyrill Bättscher (AOT), Johann Schneider-Ammann (Swiss Federal Councillor), Prof. Hans-Florian Zeilhofer (University Hospital of Basel)

At the Innovation Park in Allschwil, Johann Schneider-Ammann, Councillor and Chairman of the Federal Department of Economic Affairs, Education and Research met with the managers of the robotic surgery company AOT. The meeting, which was part of a Federal initiative, was intended to provide new impetus. Another focus was on how to best provide good conditions to accelerate the digitalization process in the business world. The Federal Councillor was given a demonstration of AOT's robot "Carlo", which can cut through bone with millimeter precision, as one of the Innovation Park's flagship projects. SHS has held shares in AOT since 2016.

KEY FACTS

Year established: 2010

Business purpose: development, production and marketing of computer assisted laser systems for bone surgery

Produkt: CARLO (Computer Assisted, Robot-guided Laser Osteotome) surgery system

Location: Basel, CH

INSIDE NEWS

SHS strengthens its team with Sascha Alilovic as its new Venture Partner



Sascha Alilovic: Venture Partner
at SHS

Sascha Alilovic is Head of Corporate Finance & Corporate Development at MorphoSys AG, one of Germany's most prestigious biotechnology companies, where he is responsible for M&A, Capital Markets and Corporate Venture Capital. At MorphoSys, Sascha Alilovic has supervised numerous company acquisitions, investments, financing and licensing transactions. During his previous positions at Siemens and at corporate finance boutiques, he managed complex corporate transactions, IPOs, financing and outsourcing deals with a total volume of more than 10 billion euros.

Sascha Alilovic studied business administration at the European Business School and computer science at James Madison University. He is a member of the Life Science Commission of the German Association of Financial Analysts (DVFA) and a regular speaker at life science conferences.

The entrepreneurial spirit in the southwest: a panel discussion on the framework conditions required for a productive start-up culture

Entrepreneurial spirit and start-up culture in the southwest were the topics of a panel discussion organized by the Reinhold Maier Foundation and the Junge Liberale at the fraternity house Stuttgardia in Tübingen. Decision-makers from the spheres of education, politics and business spoke with a business-minded audience about the requirements and innovations required for start-ups among other things. Among those present were Hubertus Leonhardt (Managing Director at SHS), Dr. Ingmar Hoerr (CEO at CureVac AG from Tübingen), Prof. Dr. Helmut Willke (Vice President of Zeppelin University and Leibniz award winner) and Gabriele Reich-Gutjahr (Member of the Landtag of Baden-Württemberg, FDP).



From left to right: Dr. Ingmar Hoerr, Prof. Dr. Helmut Wilke, Oliver Weiss, Gabriele Reich-Gutjahr MdL, Hubertus Leonhardt

CAREER

Jobs at SHS

Junior Investment Manager

Have you recently received your Master's degree in the field of business, business law, engineering or science? Are you also interested in corporate finance and have you gained practical experience in this area as part of your studies? Would you like to be involved in challenging, dynamic, and entrepreneurial activity as part of an experienced team? Then apply today. We look forward to hearing from you. [Read more >>](#)

Managing Director / MBI candidate (m/f) for medical technology, succession solution

We are regularly seeking executives who would like to become entrepreneurs with us and drive the performance of companies. Together we develop a corporate vision and strategy, which you then put into action with our support. [Read more >>](#)

Internships for students

Are you studying business, economics or engineering? We offer you the opportunity to apply your previously acquired knowledge as part of an experienced team of SHS professionals. You will benefit from a project-oriented, flexible working atmosphere, a flat hierarchy and diverse employment opportunities offered by SHS throughout the entire investment activity cycle. [Read more >>](#)

Master's thesis at SHS

Are you writing your master's thesis in business, economics or engineering? We offer you the opportunity to write it as part of a six-month internship with our company. We would be happy to help you define a current topic in the area of venture capital / private equity. Contact us. [Read more >>](#)

Master's thesis at SHS – Digital Health

Are you a student in the field of Economic Sciences or Engineering or one of the Natural Sciences? We offer you the opportunity to write your Master's thesis on the exciting topic of Digital Health as part of a six-month internship with our company. [Read more >>](#)

Jobs at SHS portfolio companies**International Sales Manager (m/f)**

TRI Dental Implants AG is one of the fastest growing providers of high quality dental implants in Switzerland. In the role of International Sales Manager you will be responsible for the international distributor network of TRI Dental Implants, both in revenue and business development. You will be supported by an Assistant for International Sales. [Read more >>](#)

You can find further vacancies at TRI here: <https://www.tri-implants.com/de-de/content/comp-jobs/jobs.aspx>

CEO (m/f) Focus: Research and Development, Clinical Affairs and/or Regulatory in medical technology

Do you have experience as a managing director or are you currently in the "second row" and want to make the next step. Experience with project management of product developments, clinical trials, and/or approvals in the cardiovascular environment are desired. You should speak fluent English. [Read more >>](#)

PRESS REVIEW**Selected press starting March 2017**

A selection of relevant articles about us and our portfolio companies:

Wirtschaft in Baden-Württemberg, June 2017, Page 20 ff.: "Investieren mit viel Geduld" (Investing with patience)

"Wirtschaft in Baden-Württemberg" published a detailed portrait of SHS. With a specialization on the medical technology industry, the Tübingen-based investor is unique in Germany. Due to the long approval procedures and regulations, investment in this industry requires a lot of patience. In the article, Hubertus Leonhardt explains what else has to be taken into consideration. [Read more >>](#)

Wirtschaft in Baden-Württemberg, June 2017, Seite 20 ff.: “Knochenersatz aus dem 3-D-Drucker“ (Bone replacement from a 3D-printer)

"Wirtschaft in Baden-Württemberg" reported on EIT, a manufacturer of spinal implants using 3D printing. The new technology allows for more complex implants, which are, for example, adjustable in height. With the support of SHS, the portfolio company intends to take the next steps of the international expansion, especially in the United States.

[Read more >>](#)

Export Initiative for the German Healthcare Industry, 1 June 2017: “Equity capital plays big role in innovative German medical technology”

The "Export Initiative for the German Healthcare Industry" initiated by the Federal Ministry of Economic Affairs has shed light on the role of equity capital in financing innovation. It references the financing study conducted by SHS in cooperation with Professor Koziol of the University of Tübingen. [Read more >>](#)

Investment Focus

Sector:	life sciences (medical technology, diagnostics, applied technologies, industrial biotechnology/pharmaceutical industry; no drug development)
Geographical Focus:	Germany, Austria, Switzerland
Reasons for investment:	growth capital, strengthening equity, MBO/MBI, change of shareholders/succession, M&A financing, spin-off
Company situation:	growth/expansion, succession/company sale, internationalization; operating profit may be negative for growth, or for technology-related reasons
Transaction value and Investment size:	transaction value: up to € 100 mn; investment amount SHS IV: € 2-20 mn, with a co-investor from the SHS-network up to € 50 mn
Investment types:	majorities or minorities, equity & financial instruments similar to equity