single market entrepreneurs A LISBON COUNCIL INITIATIVE **SIMES in the single market**

A growth agenda for the 21st century

Michel Barnier Foreword: SMEs and the single market Ton Wilthagen SMEs unite!

Sören Stamer Taking the leap: A European in Silicon Valley Ann Mettler Changing times, changing faces Richard Pelly Improving the funding landscape for entrepreneurs Anthony D.Williams Micro-Wikinomics: How technology changes SMEs Emma Vandore Inside Tech City Daria Tataj Women entrepreneurs: Key to solving the crisis



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A Lisbon Council publication Edited by Paul Hofheinz and Ann Mettler

Foreword by Michel Barnier

Essays by Ann Mettler, Richard Pelly and Helmut Kraemer-Eis, Sören Stamer, Daria Tataj, Emma Vandore, Anthony D. Williams and Ton Wilthagen

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s1ngle market entrepreneurs

Foreword: SMEs and the single market, a growth agenda for the 21st century

by Michel Barnier



Michel Barnier is member of the European Commission, responsible for internal market and services.

Improving the funding landscape for entrepreneurs

by Richard Pelly and Helmut Kraemer-Eis



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Women entrepreneurs: Key to solving the crisis by Daria Tataj



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by Sören Stamer



Sören Stamer is CEO and co-founder of Yokudo, a start-up company, and a member of the board of directors of the Lisbon Council, a Brussels-based think tank.

Micro-Wikinomics: How technology changes SMEs by Anthony D. Williams



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Changing times, changing faces by Ann Mettler



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Inside Tech City by Emma Vandore



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Together for new growth 200 YEARS of the single market

SME CENTRE POLICY BRIEF – SMES IN THE SINGLE MARKET



Foreword: SMEs and the single market, a growth agenda for the 21st century

by Michel Barnier

At the end of the year, the European single market will turn 20.¹ Since its launch in 1992, it has transformed the way Europeans live, work, travel, do business and study. It has opened up new opportunities for businesses to expand and learn how to become successful globally. In particular, it has made it possible for many small- and medium-sized enterprises (SMEs) to sell their goods and services across borders, without specific taxes or other obstacles. They have benefited from common European standards instead of having different national standards for every product. Where such common standards do not exist, SMEs can rely on the principle of mutual recognition, which means that a product lawfully produced or marketed in one European Union member state can be freely traded in any other member state.

responsible for internal market and

Michel Barnier The single market is a major strength for Europe's is member of SMEs. But SMEs in turn are a key asset to the the European single market. Europe's 23 million SMEs represent Commission, more than 99% of all businesses and employ over 90 million people.

services. However, despite the progress, this is no time for complacency. European citizens and companies are suffering the consequences of an unprecedented series of crises. Unemployment in the European Union is above 10%, businesses face difficulties accessing funding and populism is on the rise across Europe. The single market risks being the first victim of these sombre developments, whereas it should on the contrary be regarded as one of our main assets to help get us out of the crisis.

> We need to preserve the single market and use it as a platform for new growth in Europe. But we will not achieve this goal by simply resting on our laurels. We need to accept that the single market is not perfect and look carefully at how it works. We need to acknowledge that there are some flaws, gaps and missing links - and to find the best ways to improve this.

This is the purpose of the Single Market Act, which was launched by the European Commission in April 2011.² It contains 12 so-called "levers for growth" and several key actions to make life easier for citizens, consumers, workers and businesses, with a general priority given to SMEs, which are responsible for 85% of recent net job growth.

Let me take six examples of how we intend to place the "think small first" principle at the heart of our action.

1. Use all the tools available to promote SMEs' access to finance

This includes access to EU funds, such as loans from the European Investment Bank, which disbursed almost €40 billion to SMEs between 2008 and 2011. But we also intend to facilitate SMEs' access to private sources of funding. Today in the EU, only 2% of SMEs' funding needs are covered by venture capital, compared to 14% in the US. Socially oriented investment funds could also be better developed in Europe. We have proposed legislation to make it easier for venture capital funds and socially oriented investment funds to raise capital on an EU-wide basis. We also want to facilitate bank financing – with more solid and better capitalised EU banks - and SMEs' access to capital markets, through greater visibility for SMEfocused stocks and lower reporting requirements for listed SMEs.

2. Further reduce the administrative burden for SMEs

According to the on-going reform of accounting rules, SMEs will be subject to fewer reporting requirements and more companies will be defined as small- and medium-sized. We have also proposed a wider use of electronic VAT billing, which would mean savings of around €18.4 billion for businesses, as well as a better implementation of the right to interest if suppliers pay late.

3. Improve the single market for services

The service sector represents 70% of EU gross domestic product and is dominated by SMEs. In spite of the single market rules, many SMEs wanting to provide their services across borders still have to deal with a lot of red tape. National rules discriminating on the basis of nationality or residence or subjecting service providers to "economic needs tests" still remain. We want to

' The single market should be regarded as one of our main assets to help get us out of the crisis.'

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put an end to these practices and implement a "zero tolerance" policy towards EU member states that do not apply European rules. This is all the more crucial as calculations show that a full implementation of the Services Directive could add up to 2.6% to EU GDP by 2020 and bring many new opportunities to SMEs.

4. Build a genuine digital single market

For many SMEs, e-commerce means the possibility to expand their supply from a local market of a few thousand customers to a pan-European market of 500 million consumers. However, the EU single market for e-commerce is still not working as it should, as there are significant differences in the rules, standards and practices applied by each member state. As part of our strategy aimed at doubling the share of e-commerce in retail sales (currently 3.4%) by 2015, we are taking initiatives to accelerate the standardisation and interoperability of payments by card, Internet or mobile phone. We are also working to develop a more efficient and affordable delivery of products across Europe.

5. Help SMEs better protect their intellectual property for example through the creation of the European unitary patent

Today, protecting an invention in all 27 EU member states can cost up to €36,000 due to translation, administrative and procedural costs. Under the new system, costs will be reduced sevenfold.

6. Help SMEs win more public procurement contracts

Today, experience shows that the cost of bidding is too high for many SMEs. We have recently proposed to cut red tape by reducing documentation requirements (for instance, only the company winning the contract would have to provide documents) and by generalising e-procurement in the EU by 2016.

All these initiatives from the Commission represent concrete steps aimed at making the single market even more SME-friendly. We now have to ensure that they are rapidly transformed into binding legislation by the European Parliament and the Council of Ministers.

For our part, we will continue to look for ways to make life easier for SMEs. New initiatives are included in the Single Market Act II, proposed in early October.

Furthermore, European citizens, businesses, think tanks and public authorities will all have a chance to discuss our proposals and suggest new ideas in the course of the Single Market Week, which will take place across Europe from 15 to 19 October 2012.

I would like to thank the Lisbon Council, and the Single Market Entrepreneurs Centre, for taking an active part in this event, and to encourage every reader of this publication to share their ideas and projects with us. Let's join forces to adapt the single market to the needs of SMEs and lay the foundation for new growth in Europe.





Taking the leap: A European in Silicon Valley

by Sören Stamer

There are moments when you feel invincible, moments of pure elation and tomorrows filled with possibility.¹ Then there are moments when you stumble on hard realities, when unexpected troubles drain your energy and turn your stomach. Despite the numerous hurdles to creating something from nothing, entrepreneurs continue to emerge, willing to tackle the unknown. Their victories and challenges are our own, since the technology they develop through entrepreneurship and innovation will determine our future. As the techno-sage Marshall McLuhan once said, "We shape our tools and thereafter our tools shape us."2

Sören Stamer is CEO and co-founder of Yokudo, a Silicon Vallev-based startup. He co-founded his first company, CoreMedia, when he was a student and turned it into most innovative and fastest-growing Born in Hamburg, Mr. Stamer lives today in Silicon Valley. He is a member of the board

As in the past, change will happen in unforeseeable ways, and - given the accelerating rate of innovation in a global, networked society where ideas careen around the world in seconds – the transformation will be even more fundamental than anything we have experienced before. To address this new reality, Europe must change its policies regarding entrepreneurship and innovation.

one of Germany's In the last 20 years, the World Wide Web - one of the greatest European inventions of all time - has given birth to an avalanche of innovations. People software companies. around the world share ideas and participate actively in the emerging global information society, with the majority having daily access to mobile communications and the Internet. For the first time in history, they are able to actively participate in a of directors of the truly global market, a paradigm that is changing the Lisbon Council. competitive landscape for many industries.

> Global social networking and the ubiquity of mobile phones – more than six billion subscribers at last count - are also disrupting the balance of power between central authorities and the people.³ As a result, startups like Facebook and Twitter have become platforms for people not only to poke and follow their friends, but also to build powerful movements for social change as we have seen with the wave of popular revolutions in the Middle East and North Africa.

Entrepreneurship and innovation are key forces for economic growth and new employment. In this increasingly networked world, rising complexity and the rapid rate of change will continuously shift the competitive advantage from big, established companies to innovative, agile newcomers.⁴

Given these dynamics, Europe will face intensifying global competition. As global network effects widen the gap between the winners and the rest, the stakes are higher than ever before. Europe's policies for innovation and entrepreneurship will have a profound impact on Europe's future competitiveness. Europe is well-positioned to capitalise on this rapid innovation cycle. The European Union has created the largest integrated market and the highest standards of living globally, it stands for diversity, peace, stability, fairness and justice, culture and tolerance, with many countries hoping to join the EU at some point in the future. Europe should build on these strengths and aim to become a beacon of entrepreneurship and innovation in the world.

So how can the European single market help entrepreneurs? And how can entrepreneurs help Europe's single market?

According to Anders N. Hoffmann, the real policy challenge for the EU in the field of entrepreneurship is not a lack of start-ups, but a lack of fast growth in start-ups - an area where a single European market could make a real difference.⁵ Policymakers must deal with specific barriers if they want European companies to grow fast. Drawing on my own personal experience as a European entrepreneur who recently moved to Silicon Valley to start a new company, I propose three action items to overcome these barriers:



' Europe should build on its strengths and aim to become a beacon of entrepreneurship and innovation in the world.'

1. Create a single, large and unified market

The sheer size of the domestic market is a major advantage to United States companies. While the European market as a whole is larger, it remains – even on the 20th anniversary of the single market that we celebrate in these pages – fragmented by languages, national structures and local cultures. While local cultures and languages are rightly here to stay, national regulatory and legal structures should be reevaluated. Do the disparate copyright regimes, telecoms regulations and privacy standards, for instance, create value for European citizens by being country specific? Some might be more of a cumbersome legacy than an asset.

Europe's diversity can be an advantage for startups that want to address a global audience in a localised way. Tailoring offerings to local cultures and business practices is a potential strength of European start-ups. However, legal and structural hurdles often stand in the way and must be addressed in order to increase the chances for fast-growth start-ups to emerge.

The EU should aim high in order to create the best legal framework possible for a global networked society. The Internet brings new challenges for legal systems around the world. Not all existing laws make sense given the reality of the Internet as a global medium, and new aspects need to be regulated for the first time. How are privacy, free press, and freedom of speech to be handled best in a global networked society? The Europe 2020 Agenda should make these questions into top priorities. 'While the European market as a whole is larger, it remains – even on the 20th anniversary of the single market – fragmented by languages, national structures and local cultures.'

2. Embrace change

When I stumbled upon Joseph Schumpeter's work on entrepreneurship and innovation several years ago, I realised more fully why I had been drawn to being an entrepreneur. Schumpeter noted that the creative destruction resulting from innovation and entrepreneurship is the force that creates sustainable long-term economic growth.⁶ His conclusion that radical innovation will lead to a better society captures the essence of what has motivated me to start and build new companies.

However, Schumpeter's work seems to be interpreted differently in the US (and especially in Silicon Valley) than in Europe. My impression as an entrepreneur is that Europe tends to optimise existing structures, while Silicon Valley has a greater appetite for radical change. This difference in attitude has consequences for the availability of venture capital, the focus of entrepreneurs, and the social acceptance of failure. "Fail often, fail fast" is the mantra of Silicon Valley. Having tried something and failed is generally perceived as a badge of honour and as good preparation for the next venture, whereas, in Europe, there is still a stigma associated with failure.

This fast-learning culture has become a defining quality of the Silicon Valley ecosystem. It is evident not only in small start-ups, but also in established, market-leading companies. As a result, the collective learning curve of companies in Silicon Valley tends to be significantly higher than of those in Europe. A case in point: Apple's entry into the smartphone market with the iconic iPhone was rewarded with global market dominance (after only three years, the iPhone accounted for more than 50% of all profits in the global cell-phone market, and today, after only five years, it accounts for more than 70%).7 Google quickly followed their lead and launched the Android mobile operating system. Again, after just three years, Android became the global market leader for smartphone software.8 Nokia, on the other hand, one of Europe's long-standing stars and the dominating mobile phone market leader of the last decade, has not been able to innovate with nearly the same pace and has been heavily punished with declining market share and lost momentum. Even the possibility of the eventual disappearance for this former giant has become a topic of media speculation.9

Europe must increase its appetite for change and embrace innovation to attract risk-taking entrepreneurs and enable more high-growth start-ups. The Europe 2020 Agenda should promote more angel investment in early stage start-ups and bankruptcy laws that prioritise successful re-starts.

3. Establish dense and diverse networks

It has been observed that the rate of innovation is increased when specific geographic areas have a higher density and diversity of people organised around a common industry.¹⁰ Europe should adopt this approach to foster innovation.

San Francisco and Silicon Valley are full of ambitious people who want to make the oftmentioned "dent in the universe," and all of them believe they can. In this region, the density of highly networked, like-minded people creates an ecosystem that enables the fastest dissemination of ideas I have experienced thus far. The chance to be a part of this ecosystem attracts entrepreneurs from around the world, further increasing the density and diversity. Over half of all start-ups in Silicon Valley has one or more immigrants as a key founder.¹¹

Europe would also benefit from opening up more and attracting global talent through proven lures: high-quality universities (that are more affordable than those in the US), an attractive visa programme for entrepreneurs and their families and a fair chance to become a European citizen. Europe can further increase the effective density and diversity of Europe's citizenry through greater Internet access. To enable an even denser social network and more elaborate idea exchange, the Europe 2020 Agenda should make low-cost, transnational broadband access to the mobile Internet a top priority.

The potential advantages of a single European market offer a great opportunity to strengthen Europe's role in a global, networked society. Promising developments like the recent rise of Berlin as a hotbed for start-ups in the creative space show Europe's potential. Entrepreneurship and innovation will be key drivers of progress and change in the next decade. By making the three steps outlined above into the cornerstone of single-market policy over the next two decades, Europe can position itself as a vibrant ecosystem for innovation.



Changing times, changing faces

by Ann Mettler

When Europeans think of entrepreneurs, they usually imagine grand personalities like Ernest Solvay, Werner von Siemens or Louis Renault. These distinguished gentlemen - and they are all gentlemen - started from scratch and went on to build large, global companies that managed to add value, drive innovation and beat competitors for decades, often centuries.

executive director and co-founder of the Lisbon Council. a Brussels-based

Ann Mettler is They are household names and epitomise the image that Europeans have of entrepreneurs: grand and wealthy individuals, mostly male, employing thousands of staff, successful throughout their lives and weathering every economic storm with bravura, think tank. only to emerge stronger and better.

That was then - and this is now.

Today more people than ever before choose to work for themselves but few, if any, will come to resemble people like Werner von Siemens. Indeed, it is doubtful that any company founded today will become a multinational company in the traditional sense, with operations in countries throughout the world and staff in the tens of thousands. That is because, thanks to digital technologies, it is no longer necessary to become big to attain scale and go global.1 By the same token, few of today's young entrepreneurs would have the aspiration of becoming a life-long "industrialist," pledging allegiance to one venture and taking permanent responsibility for swaths of employees. They are much more likely to resemble Peter Arvai, the Swedish-Hungarian entrepreneur, who co-founded Prezi, an innovative presentation software company, in 2009. Today, Mr. Arvai employs close to 100 employees from 14 countries and three continents.² He says he moved to the US because Europe's market on its own is still too small - and too fragmented - to offer the potential scale a fast-growing company like his will need.

The single market worked well for the old generation of entrepreneurs - and could still work well for the new one. But that will only happen if policymakers wrap their minds around the dramatic new realities. In an environment of extreme economic volatility, and powered by the interconnectivity of the Internet, today's most successful organisations are smaller, faster - and less inclined to grow much beyond a handful of employees focusing closely on delivering value for consumers and clients. Take Instagram,

a US-based company founded in October 2010 by Kevin Systrom, a young man who considers himself more of an artist than a businessman. Mr. Systrom devised a service to touch up and share photos, and hired a handful of employees to help flesh out his vision. The traditional European approach to this firm would have been to ignore it, classifying it condescendingly as a large "micro-enterprise." The reality of course is that in a matter of only a year and a half, this 13-employee start-up posed a significant challenge to an incumbent in social media, Facebook; created and dominated an entirely new line of service, photo-enhancement; and was rewarded for its disruptive innovation with a whopping \$1 billion (€760 million) pay out when it eventually agreed to be sold to Facebook.3

Small is an asset in today's fast-moving economy

Not every small enterprise works out as well as Instagram; but the example shows that SMEs can be immensely successful – and illustrates the new paradigm in which 21st century success may lie. Thanks to technology - including the ubiquity of inexpensive cloud-based services - executives at companies like Instagram can focus on delivering value to customers, rather than coping with the inevitable rise in bureaucracy or adding layers of non-core employees as they grow. Many back-office functions, such as accounting, human resources and database management, can simply be outsourced at comparatively modest cost.4 Against this backdrop, it is not surprising that today's start-ups increase their head count much more slowly than in the past, even when they are successful.⁵ But with traditional multinationals adding jobs mostly in fast-growing emerging markets and governments cutting payroll to reduce overburdened public finances, start-ups, including small ones, are pretty much the only jobcreation game in town.⁶ Going forward, policymakers need to pay greater attention to the strategic role and high value-adding potential of smaller firms, and

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'With traditional multinationals adding jobs mostly in fast-growing emerging markets and governments cutting payroll to reduce overburdened public finances, start-ups, including small ones, are pretty much the only job-creation game in town.'

cease their inherent bias against small companies with regards to their capacity for innovative prowess, commercial disruption and likely success in the global market place – a bias which too often leads to unwarranted favours towards large incumbents.

Successful companies are more specialized and more diverse

There's another advantage today's entrepreneurs have; they know that innovation takes place at the intersection of different disciplines, meaning that specialisation on the one hand does not preclude diversity on the other - to the contrary. While debates in Europe are often dominated by the need to produce more engineers and science graduates, it is often overlooked that successful entrepreneurial and innovative teams usually consist of people with diverse talents: from business and sales to design and coding. Indeed, it has often been noted that the shortcomings of European entrepreneurial ventures is not so much the lack of new products or services but rather the lack of skills in bringing those inventions to market, in commercialising them and creating the management backbone to sustain and run a viable company. In addition to diverse skills sets, successful start-ups also need diverse talent, meaning that a clever mix of nationalities, age groups and gender are often a recipe for success in today's economy. That's a far cry from the many traditionally-run companies that still dominate the European corporate landscape, where rather conformist, middle-aged and male-dominated management teams report to - you guessed it - a male CEO.

Europe's internal market is the key to success for today's entrepreneurs and innovators

Europe's internal market is in many ways the key to success for today's entrepreneurs. Examining what specifically the internal market has to offer new ventures, six things stand out:

1. The single market fosters SME internationalisation and is a natural springboard to other countries

Internationalisation is more than ever before at the core of successful new companies.⁷ Contrary to the past, this internationalisation does not take place over years or even decades, when companies had to establish physical presences in countries where they wanted to do business. Today, internationalisation can essentially begin from day one – particularly in Europe's single market, where cross-border commercial activity is often underpinned by common standards and rules. To be sure, many entrepreneurs still (rightfully) complain that there are too many loopholes or grey areas when it comes to doing business in other European countries but nonetheless, it is fair to say that any entrepreneur would find it easiest to start an internationalisation strategy within the European Union, rather than in a third country.

2. The single market sets a regulatory framework and industry standards in which companies can thrive

Where European regulations and standards are set, successful companies follow. This is perhaps nowhere more evident than in the early success – and comparative advantage – that European companies reaped when the GSM standard was first agreed in 1987. Today, similar efforts are needed in emerging and nascent sectors and industries that need a European framework if companies are to reap the full potential of the internal market. Among them is a European strategy for cloud computing and crowd financing, as well as reform of digital copyright and the establishment of a single sales contract to protect sellers and consumers across the EU alike.

3. The single market opens markets and increases competition

Whenever closed markets are opened, economic incumbents protest – and clever, innovative entrepreneurs seize the opportunity. It is widely recognised that competition is a key driver of innovation, and it goes a long way to explaining why Europe has such high levels of innovation and productivity in the industrial sector.⁸ The internal market for goods is the only part of the single market that truly functions, leading to healthy competition which forces companies to raise their game if they want to keep up. However, the internal market for services, the digital economy and energy is far less integrated, leading to lower levels of innovation, productivity, customer choice and satisfaction.⁹ Going forward – and if done correctly – completion of the single market in the digital arena, and in energy, should unleash a wave of innovation and give unique opportunities to start-ups, as well as to more established SMEs.

4. The single market offers privileged access to half a billion consumers

Clever entrepreneurs will undoubtedly make use – and tap into – the potential that the EU's almost half a billion consumers provide. For sure, it means adapting to very different market conditions and user preferences across the continent but that only serves as a driver for more innovative,



Peter Arvai

user-centric and customised products and services – in and of itself a useful experience for any firm in pursuit of relentless improvements and adapting to varying user preferences which can be most useful in venturing into other, third-party countries or regions.

5. The single market exponentially increases the number of service providers on offer

Superior, easily-accessible business services are the lifeblood of a well-run and productive company, wanting to focus on its core competence and not get side-tracked by low value-added support functions. Especially when it comes to cloud-based services, it is not necessary to only enlist help from domestic providers, thereby dramatically increasing the number of firms one can potentially hire, allowing an entrepreneur to compare costs and quality across borders and choose the best, most suitable offer.

6. The single market offers the diversity and mix of talents that drive innovation

As innovation is very much driven by processes and by how companies organise and structure themselves, the internal market offers the diverse skills and talent base that is so often at the core of commercial success. While recruitment and movement of third-country individuals remains cumbersome in most European countries, the internal market allows and facilitates a vibrant exchange of brainpower across the continent with minimal bureaucratic hurdles. And given that digital technologies and the web effectively mean people no longer have to live where they work, putting diversity into reality has never been easier or cheaper.



Werner von Siemens

In a world in which more and more companies are small, innovative, focused on their core business, international in outlook and driven by a constant search for diverse markets and talents, there is a symbiotic relationship between entrepreneurs and the single market. They need each other. One cannot thrive without the other. And even if contemporary entrepreneurs and the companies they run have little in common with the champions of the past, they have never been more important as drivers of growth, jobs, productivity and innovation. As Europe seeks new ways of regaining economic strength and overcoming the Great Recession, small- and medium-sized enterprises are – and deserve to be – at the heart of the single market.



Improving the funding landscape for entrepreneurs

by Richard Pelly and Helmut Kraemer-Eis

Even in the best of times, the smallest firms often have trouble obtaining financing. Uncertainty and asymmetric information between the demand side (entrepreneur) and the supply side (financial intermediary) create a perpetual structural difficulty for small- and medium-sized enterprises (SMEs). We could even simplify that: the smaller and younger a company is, the bigger its financing challenge. With no track record, no long standing relationship with a financier, and little capital or collateral, young companies seldom have an easy time finding the funds they need to grow.

chief executive of the European capital arm of the European Investment

Richard Pelly is In times of crisis, SMEs typically find capital even harder to come by. The past five years have been no exception. Although global economic prospects **Investment Fund** have gradually improved since 2009, the recovery (EIF), the venture has lagged for small enterprises. In fact, recent data for the SME business environment suggests that SMEs' business expectations continue to worsen.¹ Bank (EIB). Helmut Fund raising and investment activity have improved Kraemer-Eis is head in private equity for mid-cap companies but remain of research and challenging at the venture end of the market. market analysis Overall, credit conditions for SMEs are still at the EIF. tightening, and access to bank finance remains a pressing problem for European SMEs, in particular for micro-enterprises, according to the European Central Bank.²

> Beyond the normal scarcity of credit for SMEs that would be typical at this point in the recovery, the confluence of a variety of austerity, growth, and regulatory initiatives may be compounding the difficulties. In particular, increased capital requirements for banks and insurance companies

may be shrinking the supply of both debt and equity to private enterprises. All these factors seem likely to lead to significant changes in the business models of providers of entrepreneurship finance, but what the impact of these many simultaneous adjustments might be is still unclear.

This has also to be seen against the background of the importance of SMEs for the European economy: SMEs provide two out of every three private-sector jobs and contribute to more than half of the total value-added created by businesses in the EU.3 That's why SMEs are also called the "backbone of the European economy," being primarily responsible for wealth and economic growth, next to their key role in innovation and R&D.4 Difficult access to finance for SMEs creates a significant barrier to innovation and growth for the entire economy. In addition, scholars have found that economic growth depends at least to some degree on the soundness of economies' financial systems.5



Chart 1: EIF's financing partners and the stages of SME development



SME

SME.

SME

Chart 2: Structure of the European Angels Fund

Fund (EIF) enhances access to finance and plays a critical role in stimulating growth of SMEs and micro-enterprises. The fund's programmes cover the entire life cycle of companies, from the startup phase through the development and expansion stages (see chart 1 on page 12). As the European Investment Bank's specialist provider of SME risk finance across Europe, we do not provide finance to SMEs directly but always in partnership with a wide range of financial intermediaries like banks, guarantee institutions, or venture capital (VC) funds that provide the sources of funding for entrepreneurs in Europe.

To try to limit the damage the crisis has wrought on SMEs, the EIF has increased its counter-cyclical role in providing financing solutions to boost entrepreneurship and innovation. In 2011, in its role as a catalytic investor in European venture and growth capital funds, the EIF increased its volume of equity signatures (transactions signed by the EIF) to an all-time high of €1.1 billion. Compared to the past, the EIF has also increased its average stake and average commitment in individual funds.

The EIF has focused in particular on encouraging venture capital. In VC, investors' sentiment is

currently very cautious: in 2011, government agencies accounted for a third of total investors into VC funds, up from 7% in 2007 (but with a much higher amount of fundraising in 2007; €8.4 billion compared to €4.9 billion in 2011). Even if this higher share shows that government agencies continue to play a role in supporting the market in a countercyclical way, it is not sustainable for the long term. To improve the situation and provide incentives to other classes of investor to invest in European VCs, the EIF has undertaken several new initiatives, such as the European Angels Fund, a co-investment fund to provide equity capital to angel investors (see chart 2 above). Launched in Germany in March 2012, the project will be extended to other European countries and regions to achieve a pan-European coverage.

At the same time, the EIF is also working to encourage a range of leading corporate investors to invest into European VCs. To reach those investors, the EIF has designed an Innovation Platform, of four sectorally focused funds-of-funds (each with a target volume of €300 million and with defined main

' In 2011, the EIF increased its volume of equity signatures to an all-time high of €1.1 billion.'

themes and investment strategies). The intention is that the Innovation Platform will foster cooperation between strategic corporate investors, fund managers and portfolio companies (see chart 3 below).

In all these efforts, our goal is not just to provide capital. It is to help encourage network building, collaboration, and the creation of a financing ecosystem that can overcome the fragmentation of the European VC market. The EIF is also trying to encourage more bank lending. The EIF has developed a number of portfolio guarantee instruments in order to tailor risk-sharing mechanisms according to market needs and in line with appropriate risk sharing principles. Innovation is key for Europe's future and many SMEs are innovative, but many banks consider financing innovation too risky for their portfolio. Risk Sharing Instrument for Innovation (RSI) is a joint pilot guarantee scheme of the EIF, the European Investment Bank (EIB) and the European Commission's DG research and innovation

Chart 3: Structure of the Innovation Platform





Chart 4: Structure of Risk Sharing for Innovation (RSI)

to support the financing of innovative SMEs and small mid-caps (see chart 4 on page 14). Guarantees are provided to selected banks and leasing companies to encourage them to extend financing to smaller companies in support of their research, development and innovation projects. The pilot targets an overall portfolio of €1 billion of loans to innovative European SMEs.

Efficient markets do not require public intervention. However, as mentioned earlier, there are market imperfections for SME finance serious enough to warrant the intrusion. This intervention must be conditional upon ensuring "additionality," i.e. not crowding out private activities, but rather serving as a catalyst for the entry of private capital in order to create a self-sustainable market in the long run. The EIF's philosophy in all its efforts is to improve conditions for entrepreneurship and the overall business climate for SMEs without distorting efficient market forces. At the EIF, we believe any public SME support must be made with the understanding that:

1. Public money is not enough

Public money alone cannot finance SMEs. Instead, public money is often best used as seed money to lure private investors. This is why the EIF works to catalyse public-private partnerships. For the same reason, we also encourage a move away from grants and towards revolving financial instruments. Used in an intelligent way via financial intermediaries, financial instruments such as guarantees, loans or equity have multiplier effects and encourage more private financing. In many instances, these instruments have greater amplifying effects in the market and provide a more efficient deployment of public money than would outright grants.

2. Investment decisions should be made by marketoriented professionals

The past experience of many markets suggests that public money should be channelled through experienced, market-oriented professionals who make investment decisions on a business basis, independently from political decisions.

3. Risks must be shared

Furthermore, public support cannot remove the risk associated with commercial activity at the firm level – and it should not attempt to do so. Public financing can best be used to make investments more attractive to private investors, not to shoulder the entire risk.

4. One size does not fit all

Finally, it is impossible to design catchall policy instruments – there must be a toolbox of targeted instruments. To be of optimal value to the market, this toolbox must be constantly under review. New instruments must be tested and constant adjustments made to meet the evolving needs of the market.

In this article, we have briefly shown the EIF's toolbox and illustrated real examples for its further development, also increasing its impact by extending its range of counterparts (corporate investors, business angels, etc.). SMEs and innovative private sector projects can benefit from public support, particularly in a difficult business cycle. However, to achieve its maximum impact, that support must be flexible, closely monitored and designed to catalyse private capital. Ultimately, public funds are best used to draw-in private sector investment, not replace it.

' Young companies seldom have an easy time finding the funds they need to grow.'



Micro-Wikinomics: How technology changes SMEs

by Anthony D. Williams

In less than two decades, Information and Communication Technologies (ICT) have revolutionised the way we work, altered the structure of entire industries, and forever changed the method by which we inform, educate and entertain ourselves. Yet, in the context of the economic malaise sweeping across Europe, the Internet's most vital contribution to modern prosperity is arguably yet to come. It could still play - and is already playing – a key role in making small- and medium-sized businesses more potent contributors to economic growth and job creation.¹

innovation at the business bestsellers Wikinomics: How Mass Collaboration Changes Everything and Macro-Wikinomics: Rebooting Business and the World.

Anthony D. Williams These days, small- and medium-sized enterprises can is senior fellow for harness emerging web-based business platforms to design, develop and deliver their products around **Lisbon Council. and** the world with a fraction of the resources that would co-author of the have been required just a decade ago.² Modern communications technologies, and the cuttingedge business practices they engender, are now part and parcel of what it takes to run highly dynamic and productive enterprises - enterprises that are more competitive, more agile, and more capable of exporting their products and services across borders than anything Europe has previously witnessed. Whether sourcing talent and new ideas, conducting a global marketing campaign, or collaborating with distributed teams, technology-enabled possibilities to connect, collaborate and streamline are endless. Savvy business owners can even manufacture and distribute entirely new product lines without having to own a physical plant or manage inventory.

> As policymakers search for a way out of Europe's prolonged economic crisis, they must recognise the degree to which the depth of technology adoption influences both firm performance and overall gross domestic product growth, effects that will only increase as digital technologies penetrate and reshape every economic activity and every sphere of society. Consider, for example, technology's role in reducing firm costs and overhead. Dr. Robert Hendershott, a professor at the Leavey School of Business at Santa Clara University, found that the availability of open source tools, cloud computing, and the rise of virtual office infrastructure has driven the cost of launching an Internet venture down from \$5 million [or €4.4 million at the exchange rate of the time] in 1997, to \$500,000 [or €530,000] in 2002, to \$50,000 [or €34,000] in 2008.³ Even non-tech ventures stand to benefit handsomely from cloud computing services that require no up-front investment and can scale instantly as business demands. McKinsey estimates that at least one-third of all SMEs make

extensive use of cloud technologies, and those that do have benefited tremendously, using new Internetbased services to perform the functions that entire departments once performed for large corporations.⁴

Technology's impact on firm-level productivity and competitiveness goes well beyond cost reduction. Today, SMEs can go global from day one, reaching millions of overseas consumers and talent pools with a few clicks.5 Shifting retail operations online, meanwhile, can increase cross-border sales and boost profitability. In the UK, for example, the overall sales of high- and medium-intensity web-based businesses grew by 4.1% annually between 2007 and 2010 - almost seven times faster than sales at low-and-no-web businesses. In many countries, including Germany and France, SMEs that have engaged actively with consumers on the Internet have also experienced three-year sales growth rates up to 22 percentage points higher than those companies in countries with low or no Internet presence.6

Evidence suggests that greater adoption of technology by SMEs not only benefits individual companies but also the economy at large through increased job creation, productivity improvements and economic growth. Policymakers and media commentators have sometimes bought into the popular narrative that Internet-based business infrastructures and technological automation are harming rather than aiding job creation, but the opposite is true. Techintensive SMEs not only grow and export twice as much as others; they also create twice the number of jobs.⁷ A detailed review of the French economy over a 15-year period found that while the Internet did indeed put an end to some 500,000 jobs, it created 1.2 million more – a net accumulation of 700,000 jobs in areas ranging from software engineering and online marketing to logistics and parcel delivery.8



When businesses invest in ICT, they generate bigger returns on productivity growth than any other forms of capital investment.⁹ While the returns on other forms of capital investment are about 15% on average, investment in ICT may generate up to 25% of productivity growth.¹⁰ For example, in wholesale and retail trade, a 10% increase in e-sales can lead on average to a 3.1% productivity increase, while in business and financial services, a 10% increase in the number of employees using high-speed broadband will raise productivity by around 0.9%.¹¹ Regardless of the sector, however, the most decisive gains in productivity often result from the capacity to use the Internet to conjure up radical new business models, eliminate middlemen and strip out inefficiencies. This kind of creative destruction has always been the most reliable driver of long-term productivity growth – and with the Internet we now have the most powerful platform for creative destruction the world has ever seen.

Taken together, the capacity to increase cross-border sales, turbo-charge innovation, boost productivity and create jobs makes the Internet and other modern communications technologies absolutely pivotal in Europe's quest to accelerate economic growth. Indeed, any recovery strategy that does not take these new realities into account is bound to fail, no matter how great the effort is to build up financial firewalls and better economic governance systems. As the new engine of economic growth in the 21st century (much like electricity was to the 19th century or steam power to the 18th century), ICT offers unprecedented opportunities to dramatically change business models and boost productivity across many different sectors. Therefore, it is vital that we not view ICT as the exclusive purview of technology-based start-ups but rather as an accelerator of *all* businesses, particularly SMEs, across *all* economic sectors.

So why is there not more take-up of these technologies and why is policymaking so slow to realise the potential and create frameworks that would accelerate speedier adoption? In a nutshell, it's because many stumbling blocks remain in Europe at large as well as in individual member states. A handful of important Europe-wide initiatives could eliminate many of the key obstacles to growth and innovation within the SME sector and in the economy at large, such as:

- accelerating the adoption of high-speed broadband;¹²
- streamlining and simplifying national VAT systems;
- lowering the cost and increasing the reliability of cross-border shipping;
- facilitating the creation of a safe, reliable and efficient pan-European e-payment system;
- establishing a single European contract sales law;¹³
- fostering the development of digital skills in the labour market.

Taken together, these initiatives would contribute greatly to the creation of a more coherent digital single market. And a true digital single market would, in turn, significantly boost cross-border commerce, foster new growth opportunities and help home-grown SMEs create high-quality jobs. While technology adoption is often portrayed as a niche issue, pertaining mostly to ICT companies or tech start-ups, the reality is that the creation of a digital single market is key for the modernisation of the overall economy, including the many companies and sectors that don't have ICT at the core of their business model, but that are highly dependent on a world-class digital infrastructure to be successful and competitive.

A strong, sustained recovery in Europe depends on the ability of public- and private-sector leaders to work together to deliver on this digital "to-do" list, with the ultimate aim of completing the digital single market. Simply put, the European economy needs a greater proportion of its large cadre of SMEs to morph into high-growth firms with the potential to expand and reach scale. Achieving this goal will require not only a continuous stream of new ideas capable of being commercialised and more bold entrepreneurs who can launch, nurture and scale new 21st century companies; it will also require fewer roadblocks and better infrastructure to support the growth of existing enterprises - enterprises that might otherwise remain too small and unproductive to make a meaningful contribution to net job creation and growth. As my colleague Ton Wilthagen argues elsewhere in this collection, SMEs are the backbone of the European economy. Assisting these enterprises in becoming bigger, more competitive and better able to utilise the full potential of Europe's single market of 500 million consumers, is perhaps one of the most promising ways out of the crisis. The time for action has come. 1



Inside Tech City

by Emma Vandore

If there's an upside to the world's recent economic difficulties, it's the growing interest in policy circles in helping start-ups, particularly high-value digital companies. From Dubai Internet City, to Barcelona's @22 district, to the Start-Up Chile programme, governments around the globe are looking to attract and nurture new-economy firms through a combination of subsidies, tax exemptions and zoning policies.

Emma Vandore is an urban policy and communications expert. She recently co-wrote *A Tale of Tech City*, a report about the pioneering high-tech cluster that has emerged in inner East London, for the Centre for London, a London-based think tank.

Britain is interested in nurturing start-ups, too, but has taken a different approach. In 2010, aides to Prime Minister David Cameron stumbled across a cluster of British high-tech companies that were thriving despite the recession – and without any government aid. Alerted to the potential of Silicon Roundabout, as the cluster is known, officials were quick to see the potential – and to take action. Within months, the Tech City initiative was conceived and launched by Mr. Cameron himself.

merged in innerThe idea is a simple one: rather than pumping up the initiative with subsidies
and tax exemptions, the government uses its muscle primarily to do two things.entre for London,First and foremost, it helps the cluster generate business and attract investment by
boosting its profile on the global stage through official patronage: the Duke and
Duchess of Cambridge were even recruited to help promote the cluster at an event
in Los Angeles last year.¹ But it also facilitates and encourages a direct dialogue
with the community itself through regular meetings and events, thereby creating
a positive feedback loop through which businesses can help government structure
policy in ways that might best help nurture the next Facebook. Monthly breakfasts
at 10 Downing Street and regular town hall meetings bring policymakers and the
tech-business community together, and have led, for instance, to the creation of
an "entrepreneur visa" introduced to bypass new immigration restrictions which
businesses say are depriving them of the talent they need.

It is too early to judge the success of this approach, which is still evolving, but some lessons can already be drawn. They are laid out in a report from the think tank, Centre for London, on which I collaborated.²

Our first task was to measure the size and makeup of the cluster using micro-level data on employment and firms. We found that the inner East London cluster has grown rapidly: the number of firms has doubled since 1997 to over 3,200, creating more than 48,000 jobs.³ The majority of firms in the cluster are young microbusinesses (60% were under five years old) with less than 10 staff. They range from companies serving the tech needs of the nearby financial district, to digital marketing and advertising firms building on London's traditional strengths. Over a third have an international structure of some kind, with even the tiniest companies considering it normal to work with staff, contacts and customers around the world. These are true "micro-multinationals," reaping the benefits of digitisation.⁴ To our surprise, the cluster is a lot less gender and culturally diverse than other London start-ups: the entrepreneurs in Tech City are overwhelmingly white, male, British and highly educated, with most of them in their 30s.

Firms say their location decisions generally owe much to the advantages of London: a global talent pool, the presence of like-minded firms, amenities, the English language and a geographical location midway between Asia and the Americas.



' Europe can learn much from Tech City, from the accelerated serendipity of co-working spaces, to the importance of mentoring.'



' If there's an upside to the world's recent economic difficulties, it's the growing interest in policy circles in helping start-ups.'

Being in the east end of the city is also an attraction: relatively cheap rents, and a creative "vibe." Crucially, the area is packed with cafes, bars, nightlife, and street art attractive to the young, skilled urbanites that digital businesses want to secure and retain. Close to the city centre, it is also easily accessible.

Since the late 2000s, overall job growth has flattened even though the number of firms has increased. This could be a result of individuals starting their own businesses after being laid off. Also worth noting is that while there are many laudable successes – from Last.fm, the music website purchased by CBS for £140 million (or around €210 million), to Mind Candy, creator of the wildly popular children's Internet game Moshi Monsters – the area has yet to produce a heavyweight champion, let alone a company of the Facebook order of magnitude.

Our research also identified several areas of concern, including the pressing need for skilled developers and specialist staff, the lack of which, together with immigration restrictions, hampers the ability of companies to grow. The entrepreneur visa, while welcome, doesn't cover the skilled chief technology officers and other senior staff these companies need. A smaller but significant problem is access to finance.⁵ Many firms complain that investors, unlike those in Silicon Valley, don't understand the nature of tech businesses (a study of the role of creative firms in the UK economy shows that the perception of the riskiness of this industry is exaggerated).6 Anticipating difficulties raising money from banks and institutional investors, firms are tapping family and friends for early stage funding. The government is seeking to encourage this through the Seed Enterprise Investment Scheme, which offers 50% tax relief on seed investments up to £100,000 (or €123,000) per investor and £150,000 (or €185,000) per company. But this means that those who do not have rich networks are clearly disadvantaged, which might help explain the lack of diversity in the cluster.

Several firms show little desire to grow their business beyond a modest size. Partly, they are nervous about relinquishing control of the company they have sweated to found, and partly they lack knowledge about the potential returns of doing so (40% of a £1 billion company is worth more than 90% of a £100 million company). Wanting to stay relatively small could be a sign of lack of ambition, or it could indicate that the skills required to expand a company and take it global are often different than those needed to invent an idea or start a business. In addition, London's tech scene lacks highly developed professional networks that new companies can turn to. In California, venture capitalists are often serial entrepreneurs who offer advice as well as money.

To improve access to finance, we recommend that banks develop specialist digital economy offerings and that a digitally-focused government-backed fund with increased resources be established. Several firms said they had to go through more rounds of funding than they would have had to undertake in the US, hampering growth. Fewer and larger rounds of investment mean firms can grow more smoothly and with less dilution of ownership.⁷ Sarah Rigos, an analyst at Barclays, suggests venture funds should be a minimum of £50 million (or €61 million), and ideally £150 million (or €185 million), to allow longterm investment over a ten-year cycle.⁸

Much excitement has been generated by crowdfunding, where companies raise debt or equity through large numbers of small investors. While developing alternative sources of finance shows great potential, the legal framework for crowd-funding in the UK is opaque and it is hard to see how the market can develop without greater legal clarity.

The Tech City initiative has attracted great attention, but the flipside is that rents are increasing in inner East London, which worries firms. To help counter this rise, local authorities are actively encouraging the establishment of co-working spaces, which offer far more than a cheap workspace. Firms report successful recruiting from within their shared workspaces and finding help on technical problems or advice on business development. They have also met investors and contacts there.

Europe can learn much from Tech City, from the accelerated serendipity of co-working spaces, to the importance of mentoring. But a word of caution: recent history is littered with examples of clusters that failed to ignite, suggesting policy that works in one area cannot simply be transferred to another.⁹ Evidence shows that conventional area-level approaches prescribed in traditional cluster theory are less effective than those that focus on firms. Perhaps the biggest lesson from Tech City is that policy is most successful when government listens to firms, entrepreneurs and workers, fine-tuning its approach as it goes along and adjusting it to suit local conditions.



Women entrepreneurs: Key to solving the crisis

by Daria Tataj

With the European Union reeling from a financial and monetary crisis that has stalled economic development and created major social challenges, policymakers are eagerly seeking new sources of growth and job creation. And in that search, women innovators and entrepreneurs are one of the most relevant untapped resources in the European economy. Only 62% of working age-women (20-64 years old) are active in the European labour market, compared to a 75% employment rate for men and an overall Europe 2020 employment target of 75%.¹ The figures for entrepreneurship are just as sobering. Data shows that – while more than 60% of Europe's university graduates are women – only 8.3% of patents awarded by the European Patent Office are awarded to females.² Equally disappointing, of all the European businesses financed by venture capital, only 20.3% are owned by women.³

Dr. Daria Tataj is executive governing board member at the European Institute of Innovation and Technology (EIT) and professor at the Warsaw University of Technology Business School.

The return to healthy economic growth will depend on the ability to increase the productivity of the entire working population. In advanced knowledge economies, productivity is a function of innovation and entrepreneurship on the basis of research and development in conjunction with non-technological innovation. Traditionally, gender equality, labour market policies and social inclusion have most often been presented as the justification for policy interventions aimed at the development of women. Simultaneously, the policy instruments deployed to reach targets like the 60% participation rate in the Lisbon Agenda were anchored in the cohesion and structural funds and to some extent in policies related to science, technology, innovation and entrepreneurship.

But the European Commission report on "Progress on Equality Between Men and Women in 2011" presents a new approach; it argues that equality is essential to the EU's response to the current economic crisis.⁴ It brings the issue of women economic empowerment high on the policy agenda and in essence reframes the debate from a question of gender equality to a matter of gender equity. The question then becomes, to what extent can women innovators and entrepreneurs contribute to increasing productivity, and creating wealth and jobs? What are the barriers preventing women from making a bigger impact in business and society? And what policy interventions could be deployed at the European level to overcome these obstacles and empower more women in Europe?

In Europe, women lag behind men in terms of entrepreneurial activity and especially innovationdriven entrepreneurship.⁵ A smaller percentage of women-led businesses are innovative. And, while there is no evidence that innovativeness or entrepreneurialism is gender specific, and no evidence that women have lower entrepreneurial skills, nevertheless, when compared with men, women create fewer jobs, are less likely to be selfemployed, start fewer businesses of their own and have less intention or ambition to do so, and if they do, they tend to choose sectors which are not as competitive and innovation driven.⁶

To be sure, various forms of women-led economic activity are important to the growth agenda. But the greatest impact could be delivered by increasing the number of women-funded and women-led highgrowth enterprises. Innovation-driven ventures are often linked to university graduates, and to the research and innovation coming out of universities and labs. These are essential nodes in the innovation network, since they attract and integrate knowledge communities and often bridge the gap between academia, business and governments. Universities attract and develop talent for innovation and play a pivotal role in shaping the attitudes, skills and long-term support networks to foster innovation and entrepreneurship among female students. As a result, policies aimed at exploiting the potential of women in business, academia, public institutions and society at large need to be anchored in policies that integrate the knowledge triangle, i.e., research, education, and innovation as well as entrepreneurship. Labourmarket policies, social inclusion and other policies related to women in the e-economy should be integrated into a comprehensive policy framework for women empowerment.

If high-growth enterprises are by definition also innovative, women face specific barriers to participate in the innovation processes and their participation in science, technology and entrepreneurship lags behind men.⁷ The challenges in leveraging the potential of women innovators and entrepreneurs lie in the specificity of the obstacles they face. One study classifies the obstacles faced by women into three categories: contextual, economic



and soft.⁸ The contextual obstacles are rooted in the traditional perception of a woman's role in many European societies. Stereotyped social roles lead first to educational choices and then to career preferences resulting in horizontal and vertical segregation. Women are less likely to specialise in science and technology and are less recognised in these fields. They are often more risk averse and find it more difficult to combine different social roles when working in high-stress competitive environments requiring long, flexible working hours and constant training. This social context requires much more persistence, resilience and struggle for a woman innovator and entrepreneur to succeed, whether she chooses a high-growth sector, self-employment, a life-style business or a necessity-driven start-up.

The economic obstacles partially arise from the social context and are specifically linked to access to finance and to risk capital in particular. Women are seen as less credible by investors, which limits the growth potential of their ventures in capital intensive sectors.⁹

The soft obstacles originate in motivation, self-perception, skills and training. On the one hand, the lack of adequate business skills and knowledge discourage women from taking risky career choices. On the other hand, the lack of sufficient number of successful role models and mentors limits their progress as they are often excluded from high profile networks in business and academia, where knowledge is shared and decisions are made.

These obstacles prevent growth and limit the potential impact of women. However, on the positive side, many women entrepreneurs do contribute to the economy by creating new jobs and quality work environment for themselves and others. They bring diversity, which stimulates innovativeness, especially in the non-technological aspects of process innovation, business management, organisation and culture.¹⁰ Recent data shows that women control the majority of purchase decisions, and that 80% of women believe that their role is changing for the better and 90% of those expect it will change for the better in all aspects from gender equality to politics to opportunities in the marketplace.¹¹ The Internet economy and social networking benefits them. However, women in Europe are of the opinion that they have reached a progress plateau. They do not foresee that their daughters will have more opportunities than they had.¹² Indeed, most probably the new generation of women will surely need to create social and economic opportunities for themselves.

Or the low innovative and entrepreneurial activity of women could be tackled by public policies designed to help the next generation of women innovators and entrepreneurs create high-growth, innovation driven, sustainable enterprises in the European single market. The question is, how do we design policies to change human motivations, attitudes and culture?

Over the last 10 years, many European Union member states have developed and tested a wide range of initiatives to promote innovation and entrepreneurship among women. In Great Britain, the governmentbacked Aspire Fund was created in 2008 specifically to finance women-owned businesses. In Sweden, a national train-the-teacher programme was launched to train business advisers how to deal with needs specific to women entrepreneurs. In France, *Femmes*



' The return to healthy economic growth will depend on the ability to increase the productivity of the entire working population.'

Business Angels, the first women-only network in Europe was initiated. In Germany, the National Agency for Women Start-Ups and Power for Female Entrepreneurs launched programmes for supporting women entrepreneurs specifically in science and technology. In Poland, structural funds were used to train women, provide seed funding, and also to support grassroots initiatives, such as the Congress of Women, a massive social movement, which has had an unprecedented impact by empowering women and promoting entrepreneurial behaviours. Policy initiatives at the European level were also explored in a number of ways. They originated in different policymaking institutions and included data analysis and dissemination, creation of pan-European women business networks, mentoring schemes, promotion of women's role in the economy and society, and facilitating access to information on EU funding schemes, promotion of digital inclusion, and specifically entrepreneurship, such as the European Network of Mentors for Women Entrepreneurs and Erasmus for Young Entrepreneurs.13

Assessing the effectiveness of these policy interventions poses methodological challenges. They include defining the target group ("women entrepreneur" or "woman innovator?" etc.), and separating particular variables linking entrepreneurship with particular levels of growth and innovativeness. The evaluation of results brought by these initiatives is in many cases premature, but when data is available it usually points to their limited impact. However, in most cases, these policy instruments and activities were seen to be beneficial, even if their impact was not as deep as might have been hoped.¹⁴

Current policy actions at the European level as well as at the level of individual member states - if continued and incrementally scaled up - will surely bring results over a long period of time by fostering and supporting innovation and entrepreneurialism among women. However, if we consider available evaluation reports, there is little hope that they will bring the breakthrough change so much needed in the current economic and social situation, especially among young European graduates. If the key objective is to increase the number of women innovators starting and leading high-growth businesses, and to encourage cross-border knowledge transfer, co-operation and networking, we must ask: are today's policies radical enough to bring about change in the short to medium term?

Since the current situation is recognised as calling for immediate counter-cyclical policy actions, a radical approach should be considered to empower women in society at large. Framed in this context, a new set of policies and instruments entailing major change should be developed and integrated into a coherent framework. Empowering women is fundamentally a social question. Changing motivations, attitudes, values and behaviours of decision makers and women innovators and entrepreneurs themselves could become one of the drivers of the growth agenda for Europe. The cornerstones of such a policy framework should be the following four actions:

- Give opportunity to entrepreneurial women business leaders to create growth and jobs by introducing quotas at boards of public institutions, publicly-listed companies and universities;¹⁵
- **2**. Use public funds to leverage private funds and create women-friendly SME financing facilities, microfinance institutions, venture capital funds and innovation grant schemes of substantial scale and availability;
- Support initiatives and social enterprises with a mission to promote women in business and academia and connect women to transnational entrepreneurial ecosystems, and pan-European and global innovation and business networks;
- 4. Scale up training and mentoring programmes for women and girls and promote role models in order to develop women's leadership skills and inspire them to exploit entrepreneurial opportunities at different stages of their professional and personal development.

These are controversial proposals and could surely be debated and contested. It may also be difficult to implement them at the national as well as European level. Leaders must become ambassadors to the idea that Europe can reach its "economic and employment goals only by fully using the potential of its human resources," as Viviane Reding, vice-president of the European Commission, said in an April 2012 speech.¹⁶ Europe's weakness lies in the low levels of innovation-driven entrepreneurialism. Empowering women innovators and entrepreneurs could be a powerful economic and social resource to leverage the single market, and more rapidly and sustainably overcome economic crisis.



SMEs unite!

bv Ton Wilthagen

The typical European firm is a micro firm.¹ Micro firms, employing less than 10 employees, represent some 92% of the European Union's total business sector. Much of Europe's employment and employment growth depends on small- and medium-sized enterprises (SMEs). Between 2002 and 2010, net employment in the EU grew significantly, by an average of 1.1 million jobs (or 0.9%) each year. 85% of this net increase occurred in SMEs, indicating that the share these firms have in employment growth is much bigger than the 67% share of these firms in total employment. Moreover, 58.4% of the total gross value added (GVA) produced by private businesses in the EU in 2010 came from SMEs.²

professor of labour Flexicurity, Labour Market Dynamics and Social Cohesion at Tilburg University,

Ton Wilthagen is SMEs are Europe's backbone. It does not go too far to say that Europe's economic future depends market studies on the performance of SMEs. Yet as productive and director of the as SMEs tend to be, some major opportunities to Research Institute for raise their productivity have been overlooked. Their size, which is so important to their success, has a number of disadvantages when it comes to scale economics. Training, recruiting, and research and development are only a few of the functions that tend Netherlands. to be more expensive for the typical SME than for a larger company. If as a group SMEs found ways to collaborate, they might enjoy the best of both worlds: the agility of a small firm and the cost advantages of a large one.

> Many small companies already see this opportunity. In various sectors of industry and regions, SMEs have started to further join forces, creating powerful "ecosystems" of small, innovative enterprises. For example:

- A recent European Centre for the Development of Vocational Training (Cedefop) study reveals that SMEs in some European industrial clusters have learned to cooperate on skills development.³ They do this by, among other things, pooling resources in order to optimise skills development needs, whenever individual firms are not capable of maintaining the required high training level. Such joint training efforts limit the risk of losing trained workers to other companies.
- In the Dutch Brainport region, the high-tech industry area around Eindhoven, companies have developed a joint HR strategy to attract highly skilled knowledge workers from abroad. The joint campaign not only focuses on creating a generally attractive working and living environment in the region, but also sets out to offer interesting career pathways throughout clusters of companies, rather than one job within a single firm.⁴

- In France, another type of multi-employers policy is geared toward providing more and better job opportunities to precarious workers and the unemployed, *le groupement d'employeurs*. This formula, underpinned by French labour law, permits workers to be employed by more than one firm at the same time, such as working for an agricultural firm in the summer season and at a warehouse in the winter, and offering SMEs a way to share risks and responsibilies with regard to employership. The firms form "labour pools," "flexibility pools" or shared services centres, where the pool employs and allocates the workers e.g. to cleaning, catering and maintenance work. Where traditional internal labour markets are currently eroding, cooperation can form new extended job markets within a region or sector. Such pools can also be used to prevent individual company workers from becoming unemployed by serving as a "transfer centre" offering flexibility (in case of redundancies) and security (job-to-job transitions for the worker) at the same time.
- In Bilbao, Cambridge and Stockholm, coordinated R&D projects are giving SMEs better access to advanced research. Open innovation and cocreation have become a key concept for many public investment agencies and among firms that no longer want to bear the entire risk of a major research project. SMEs can particularly benefit from these kind of joint R&D programmes. Such "open source" approaches can be very helpful for SMEs by greatly extending the potential scope and scale of their research efforts and giving them access to the cluster of an emerging industry.

' It does not go too far to say that Europe's economic future depends on the performance of SMEs.'



However, despite the efforts many SMEs and public agencies are already putting into creating these larger ecosystems, they could profit from more support. Encouraging SMEs to use these and other modes of collaboration, a strategy I call "SME United" could greatly enhance the scale and scope of the individual companies that at present cannot offer such opportunities. My own city of Tilburg adopted an SME United policy this spring after recognising the crucial role SMEs might play in its future, and I am hopeful that other municipal, regional, and national governments will eventually follow suit. Regardless of the level of government support, SMEs will continue to take the lead in devising the precise form their collaboration will take. However, government and other parties can help accelerate this evolution. At the EU level, governments can optimise intellectual property regulation to promote open innovation.⁵ National governments can create conditions in labour law and business law to support the new business, its HR function and the labour market. And local government, especially at the regional level, can join the SMEs in a triple helix of coordination with the regional economy and its labour market.⁶ SMEs of Europe – unite ! **1**

Notes

Michel Barnier

- 1 For more, visit the special web site on "Twenty Years of the Single Market" at http://www.singlemarket20.eu.
- 2 European Commission, "Single Market Act: Twelve Levers to Boost Growth and Strengthen Confidence," *European Commission COM(2011) 206 Final* (Brussels: European Commission, 2011). For more, visit <u>http://ec.europa.eu/internal_market/smact/index_en.htm.</u>

Sören Stamer

- 1 Portions of this essay originally appeared in *An Action Plan for Europe: Strategic Advice for the Post Crisis World* (Brussels: Lisbon Council, 2011).
- 2 Marshall McLuhan, Understanding Media: The Extensions of Man (New York: McGraw Hill, 1964).
- 3 "Global Mobile Statistics 2012," MobiThinking.com, June 2012.
- 4 Ann Mettler and Anthony D. Williams, *The Rise of the Micro-Multinational: How Freelancers and Technology-Savvy Start-Ups are Driving Growth, Jobs and Innovation* (Brussels: Lisbon Council, 2011).
- 5 Anders N. Hoffmann, Promoting Entrepreneurship What are the Real Policy Challenges for the European Union (Copenhagen: Danish Ministry of Economic and Business Affairs, 2006).
- 6 Joseph Alois Schumpeter, Capitalism, Socialism and Democracy (New York: 1942).
- 7 Brandon Hill, "Apple, Samsung Snag 99% of Mobile Phone Profits," Daily Tech, 04 May 2012.
- 8 Tarmo Virki and Sinead Carew, "Google Topples Nokia from Smartphones Top Spot," Reuters, 31 January 2011.
- 9 Kofi Bofah, "Nokia is Finnished: Prepare for Bankruptcy," Seeking Alpha, 09 July 2012.
- 10 Brian Knudsen, Richard Florida, Gary Gates and Kevin Stolarick, Urban Density, Creativity, and Innovation (2007).
- 11 Philippe Legrain, Immigrants: Your Country Needs Them (London: Little Brown, 2006).

Ann Mettler

- 1 Ann Mettler and Anthony D. Williams, *The Rise of the Micro-Multinational: How Freelancers and Technology-Savvy Companies are Driving Growth, Jobs and Innovation* (Brussels: Lisbon Council, 2011).
- 2 Adoption rates are stunning, with more than 13 million users of prezi worldwide.
- 3 Richard Waters and Chris Nuttall, "Facebook to Buy Instagram for \$1 billion," Financial Times, 09 April 2012.
- 4 Ann Mettler and Anthony D. Williams, Wired for Growth and Innovation: How Digital Technologies are Reshaping Small- and Medium-Sized Enterprises and Empowering Entrepreneurs (Brussels: Lisbon Council, 2012).
- 5 Agnus Loten, "With New Technology, Start-Ups Go Lean," *The Wall Street Journal*, 15 September 2011. The article notes that in the United States start-ups are only half the size they were a decade ago, thanks to digital technologies. This phenomenon can go a long way to explaining the "jobless recovery" underway on both sides of the Atlantic.
- 6 John C. Haltiwanger, Ron S. Jarmin and Javier Miranda, *Who Creates Jobs: Small vs. Large vs. Young* (Cambridge: National Bureau of Economic Research, 2010).
- 7 Giorgio Barba Navaretti et al., The Global Operations of European Firms (Brussels: Bruegel, 2011).
- 8 Olivier Blanchard, Martin Baily et al., *Reaching Higher Productivity Growth in France and Germany* (San Francisco: McKinsey Global Institute, 2002).
- 9 William W. Lewis and Ann Mettler, *Consumers and Competition: Unlocking Europe's Drivers of Productivity* (Brussels: Lisbon Council, 2007).

Richard Pelly and Helmut Kraemer-Eis

- 1 Helmut Kraemer-Eis et al, European Small Business Finance Outlook (Luxembourg: EIF, 2012).
- 2 European Central Bank, Euro Area Bank Lending Survey and Survey on the Access to Finance of SMEs in the Euro Area (Frankfurt: ECB, 2012).
- 3 EIM Business and Policy Research, *Do SMEs Create More and Better Jobs?* (Zoetermeer: EIM, 2011); see also *Facts and Figures about the EU's Small and Medium Enterprise* on the European Commission's DG enterprise and industry web pages at http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/index_en.htm.
- 4 Ibid..
- 5 Bronwyn H. Hall, *The Financing of Research and Development* (Berkeley: University of California, 2002); see also William J. Baumol et al., *Good Capitalism, Bad Capitalism and the Economics of Growth and Prosperity* (New Haven: Yale, 2007).

Anthony D. Williams

- 1 Ann Mettler and Anthony D. Williams, *The Rise of the Micro-Multinational: How Freelancers and Technology-Savvy Start-Ups are Driving Growth, Jobs and Innovation* (Brussels: Lisbon Council, 2011).
- 2 Ann Mettler and Anthony D. Williams, *Wired for Growth and Innovation: How Digital Technologies are Reshaping Small- and Medium-Sized Enterprises and Empowering Entrepreneurs* (Brussels: Lisbon Council, 2012).
- 3 Robert Hendershott, "Will the Old Venture Model Work with New Web-Based Start-Ups?," *The International Review of Entrepreneurship* Vol. 7, Issue 1, 2009. The dollar figures have been converted to euros at the prevailing exchange rate in the year of comparison.
- 4 Matthieu Pélissié du Rausas et al., Internet Matters: The Net's Sweeping Impact on Growth, Jobs, and Prosperity (San Francisco: McKinsey Global Institute, 2011).
- 5 Mettler and Williams, The Rise of the Micro-Multinational: How Freelancers and Technology-Savvy Start-Ups Are Driving Growth, Jobs and Innovation, op. cit.
- 6 David Dean et al., *The Connected World. The Digital Manifesto: How Companies and Countries Can Win in the Digital Economy* (Boston: Boston Consulting Group, 2012).
- 7 Pélissié du Rausas et al., *op.cit*.
- 8 Ibid..
- 9 Oxford Economics, *Capturing the ICT Dividend: Using Technology to Drive Productivity and Growth in the EU* (Oxford: Oxford Economics, 2011).
- 10 Ibid..
- 11 Wouter Bonte, Filiep Deforche, Wim De Bruyne and Bruno Van Tuykom, *Economy.be at the Crossroads: How the Internet is Transforming the Belgian Economy* (Boston: Boston Consulting Group, 2011).
- 12 European Commission, "A Digital Agenda for Europe," *Communication COM(2010) 245 final/2* (Brussels: European Commission, 2010).
- 13 European Commission, "A Common European Sales Law to Facilitate Cross-Border Transactions in the Single Market," *Communication COM(2011) 636 final* (Brussels: European Commission, 2011).

Emma Vandore

- 1 The Duke and Duchess of Cambridge are Prince William and the former Kate Middleton.
- 2 Rob Whitehead, Emma Vandore and Max Nathan, A Tale of Tech City (London: Centre for London, 2012).
- 3 For more, see Tech City Map, the largest unofficial listing of companies in the initiative,
- at <u>http://www.techcitymap.com</u>.
 Ann Mettler and Anthony D. Williams, *The Rise of the Micro-Multinational: How Freelancers and Technology-Savvy Start-Ups are Driving Growth, Jobs and Innovation* (Brussels: Lisbon Council, 2011). The phrase "micro-multinational" was first coined by Hal Varian, economics professor at the University of California at Berkeley in a 2005 New York Times editoral. See Hal Varian, "Technology Levels the Business Playing Field," *The New York Times*, 25 August 2005.
- 5 A recent survey shows recruitment is an issue for 51% of the respondents compared to 20% who said they have difficulty raising finance. For more information, see Emma Vandore, *The Moulding of an East London Cluster: Regeneration and Foreign Investment in Tech City* (London: UCL, Bartlett School of Planning, 2011).
- 6 Helen Burrows, Risky Business (London: Demos, 2011).
- 7 Howard Reed, Reinventing Venture Capital: Towards a New Economic Settlement (London: Demos, 2010).
- 8 Sarah Rigos, The UK Equity Gap: Why Is There No Facebook or Google in the UK? (London: GLA Economics, 2011).
- 9 Claas van der Linde, "The Demography of Clusters Findings from the Cluster Meta-Study" in Johannes Bröcker, Dirk Dohse and Rüdiger Soltwedel (eds), *Innovation, Clusters and Interregional Competition* (Berlin: Springer Verlag, 2003).
- 10 Gilles Duranton, "California Dreamin': The Feeble Case for Cluster Policies," *Review of Economic Analysis*, No. 3, 2011. Vivek Wadhwa, "Okinawa's Doomed Innovation Experiment," *Business Week*, 25 October 2010.

Notes

Daria Tataj

- 1 Eurostat, *Employment Rate by Sex* (Luxembourg: Eurostat, 2012). See also European Commission, "Europe 2020: A European Strategy for Smart, Sustainable and Inclusive Growth," *Communication (2010)2020* (Brussels: European Commission, 2010).
- 2 For more information, visit the European Patent Office website at http://www.epo.org.
- 3 EEC (GHK, Technopolis), *Evaluation on Policy: Promotion of Women Innovators and Entrepreneurship* (Brussels: European Commission, 2008).
- 4 European Commission, "Progress on Equality Between Men and Women in 2011," *Commission Staff Working Document SWD(2012) 85 final* (Brussels: European Commission, 2012).
- 5 A lack of common definition and gender specific data in many cases makes it more difficult to research and assess the issue and the effectiveness of the policy instruments in raising entrepreneurship rates among women, especially women in science and technology. In contrast to the US where an annual survey (see the Annual Report on the Federal Work Force, prepared by the US Equal Employment Opportunity Commission) monitors women entrepreneurship.
- 6 OECD, Gender Equality in Education, Employment and Entrepreneurship. Final Report to the MCM 2012 (Paris: OECD, 2012).
- 7 OECD, Innovation Strategy: Getting a Head Start on Tomorrow (Paris: OECD, 2010).
- 8 EEC (GHK, Technopolis), *Evaluation on Policy: Promotion of Women Innovators and Entrepreneurship* (Brussels: European Commission, 2008).
- 9 Ibid..
- 10 OECD, "Measuring Women Entrepreneurship", in Entrepreneurship at a Glance 2012 (Paris: OECD, 2012).
- 11 Nielsen, Women of Tomorrow: A Study of Women Around the World (New York, Nielsen, 2011).
- 12 Ibid..
- 13 For more information, visit the "Small- and Medium-Sized Enterprises: Encouraging Women Entrepreneurs" page on the European Commission DG Enterprise and Industry's website at <u>http://ec.europa.eu/enterprise/policies/sme/</u> promoting-entrepreneurship/women/index_en.htm.
- 14 EEC, op.cit.
- 15 James Fontanella-Khan, "EU Pushes 40% Quota for Women on Boards," Financial Times, 03 September 2012.
- 16 European Commission, "Progress in Gender Equality Leads to Economic Growth, Says European Commission Report," Press Release IP/12/371 (Brussels: European Commission, 16 April 2012).

Ton Wilthagen

- 1 Jan de Kok, Paul Vroonhof, Wim Verhoeven, Niek Timmermans, Ton Kwaak, Jacqueline Snijders and Florieke Westhof, *Do SMEs Create More and Better Jobs?* (Zoetermeer/Brussels: EIM, 2011).
- 2 Paul Wymenga, Viera Spanikova, James Derbyshire and A. Barker, Are EU SMEs Recovering from the Crisis? Annual Report on EU Small- and Medium-Sized Enterprises 2010/2011 (Rotterdam/Cambridge: Ecorys, 2011).
- 3 Cedefop, Sectoral Perspectives on the Benefits of Vocational Education and Training (Luxembourg: European Union, 2012).
- 4 For more information, see Ton Wilthagen, "Why European Regions Need a Triple Helix for Innovation" *Europe's World*, 18 December 2010, and Cedefop, *op. cit.*
- 5 See Ian Hargreaves and Paul Hofheinz (eds.), *Intellectual Property and Innovation: A Framework for 21st Century Growth and Jobs* (Brussels: Lisbon Council, 2012).
- 6 Wilthagen, op.cit.

Further reading

- Buhse, Willms and Sören Stamer (eds.). Enterprise 2.0 Die Kunst, Los Zulassen (Berlin: Rhombos-Verlag, 2008)
- Hargreaves, Ian and Paul Hofheinz (eds.). Intellectual Property and Innovation: A Framework for 21st Century Growth and Jobs (Brussels: Lisbon Council, 2012)
- Kraemer-Eis, Helmut et al. European Small Business Finance Outlook (Luxembourg: EIF, 2012)
- Mettler, Ann and Anthony D. Williams. The Rise of the Micro-Multinational: How Freelancers and Technology-Savvy Start-Ups Are Driving Growth, Jobs and Innovation (Brussels: Lisbon Council, 2011)
- ------. Wired for Growth and Innovation: How Digital Technologies are Reshaping Small- and Medium Sized Businesses and Empowering Entrepreneurs (Brussels: Lisbon Council, 2012)
- Mettler, Ann and Sylwia Stępień, "Why European SMEs Need the Digital Single Market," EurActiv, 23 April 2012
- Pélissié du Rausas, Matthieu et al. Internet Matters: The Net's Sweeping Impact on Growth, Jobs, and Prosperity (San Francisco: McKinsey Global Institute, 2011)
- Tataj, Daria. "Shaping Corporate Culture," in Charles Wankel et al. Management through Collaboration: Teaming in a Networked World (New York: Routledge, 2010)
- Whitehead, Rob, Emma Vandore and Max Nathan. A Tale of Tech City (London: Centre for London, 2012)
- Williams, Anthony D. and Don Tapscott. Wikinomics: How Mass Collaboration Changes Everything (London: Atlantic, 2008)
- Wilthagen, Ton. "Why European Regions Need a Triple Helix for Innovation," Europe's World, 18 December 2010

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