

Chemistry careers in SMEs

The interface between science and business –
Introduction



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SMEs

'Micro, small and medium-sized enterprises (SMEs) are the engine of the European economy. They are an essential source of jobs, create entrepreneurial spirit and innovation in the EU and are thus crucial for fostering competitiveness and employment. The new SME definition, which entered into force on 1 January 2005, represents a major step towards an improved business environment for SMEs and aims at promoting entrepreneurship, investments and growth. This definition has been elaborated after broad consultations with the stakeholders involved which proves that listening to SMEs is a key towards the successful implementation of the Lisbon goals'.

Günter Verheugen,
Member of the European Commission
Responsible for Enterprise and Industry



Slide outline

- SMEs in the UK economy
- What is an SME?
- Barriers to SME expansion
- Support programmes for SMEs



Video information

View the presentation full screen to watch the videos contained within this presentation



SME impact in the UK economy 1

- Account for 99.9% of private sector companies and provide 60% of private sector jobs
- The European Commission's SME performance review estimates the gross value added of SMEs as €473 billion or 49.8% of the UK economy
- The average company size in the UK is 6 people



SME impact in the UK economy 2

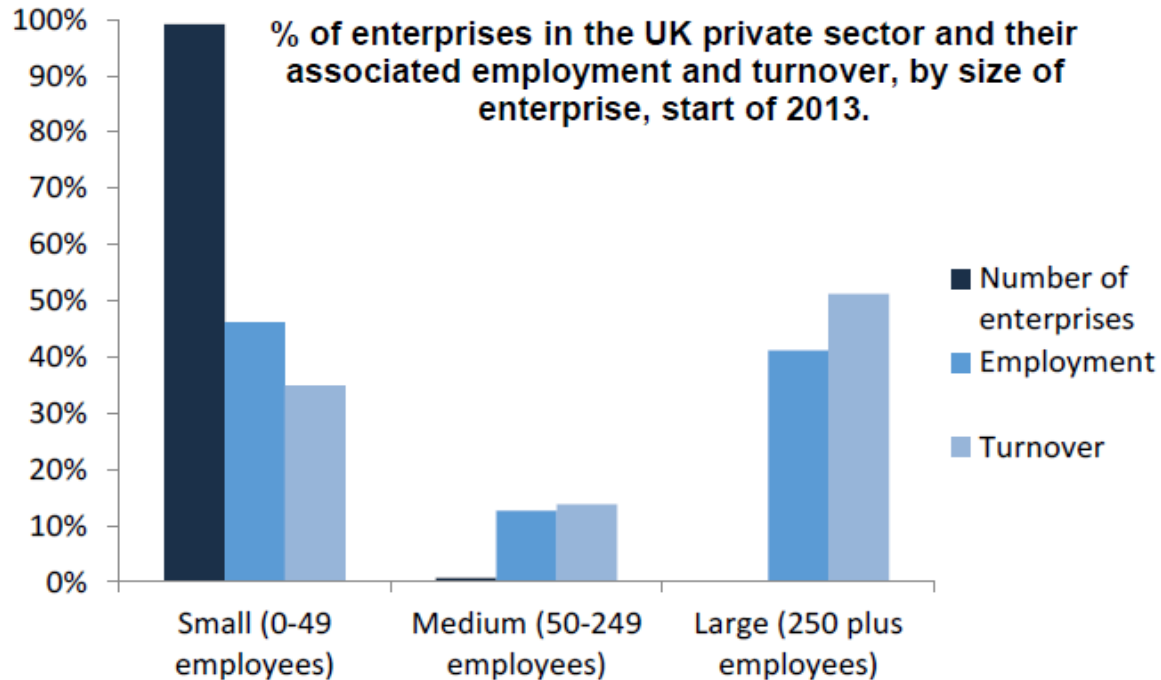
Business statistics, private sector

	Number of Enterprises			Employees	Turnover
	2012 (000s)	2013 (000s)	% change	2013 (000s)	2013 (£ billions)
Micro (0-9 employees)	4,580	4,671	2.0%	7,762	596
Small (10-49 employees)	178	186	4.5%	3,664	490
Medium (50-249 employees)	30	30	0.0%	2,998	491
Total SMEs (0-250 employees)	4,788	4,889	2.1%	14,424	1,577
Large (250+ employees)	6	6	0.00%	9,907	1,702
Total	4,794	4,895	2.1%	24,331	3,279
<i>SMEs as % of total</i>	99.9%	99.9%	0.0%	59.3%	48.1%
<i>Micro as % of total</i>	96%	95%	-0.1%	31.9%	18.2%

Source:

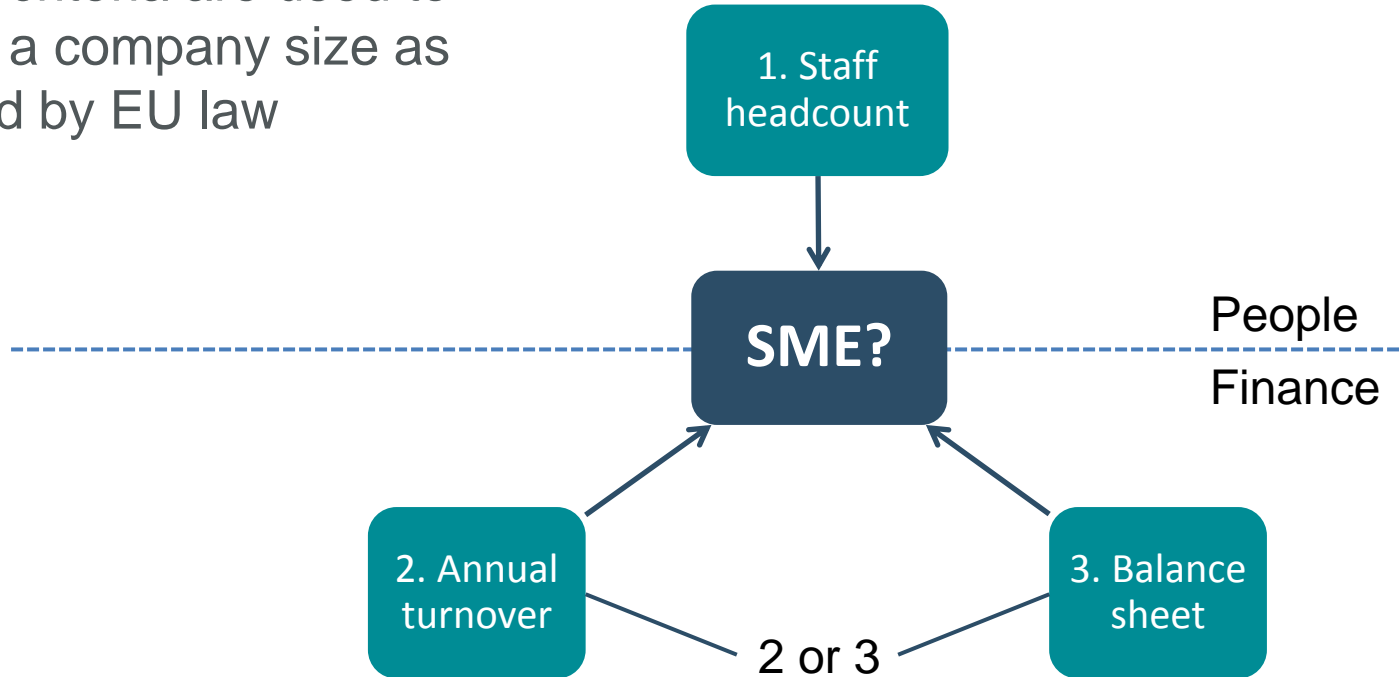
BIS, *Business Population Estimates 2013*

SME impact in the UK economy 3



What is an SME? 1

Three criteria are used to define a company size as defined by EU law





What is an SME? 2

- SME stands for small and medium-sized enterprises
- If companies qualify as SMEs then they can benefit from additional assistance and financial support

Company category	1. Employees	2. Turnover	<u>or</u>	3. Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m



EU definition of an SME

Article 1

Enterprise

An enterprise is considered to be any entity engaged in an economic activity, irrespective of its legal form. This includes, in particular, self-employed persons and family businesses engaged in craft or other activities, and partnerships or associations regularly engaged in an economic activity.

Article 2

Staff headcount and financial ceilings determining enterprise categories

1. The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million.
2. Within the SME category, a small enterprise is defined as an enterprise which employs fewer than 50 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 10 million.
3. Within the SME category, a microenterprise is defined as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million.

Source: Official Journal of the European Union

SME start-up & expansion barriers

Technological capabilities

Limited access to equipment and technology can slow development

Lack expertise to bring product to market

People

Lack of manpower

Main barriers

Face difficulty obtaining capital or credit

IP management of new products and processes is challenging

Finance

Cannot give guarantees which traditional lenders require

Difficulty complying with regulations (e.g. REACH)

Litigation and regulation



Partnerships 1

- SMEs need to collaborate with external partners due to
- Niche expertise
- Inability to obtain credit from banks
- Need support commercialising product

Partnerships 2

SME partnerships

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graph TD; A[SME partnerships] --> B[Non-profit organisations (e.g. universities and charities)]; A --> C[European Union (EU)  
UK government  
Local authorities]; A --> D[Venture capital company  
Business angels  
Overseas investment  
Multinational company];
```

Non-profit organisations
(e.g. universities and charities)

European Union (EU)
UK government
Local authorities

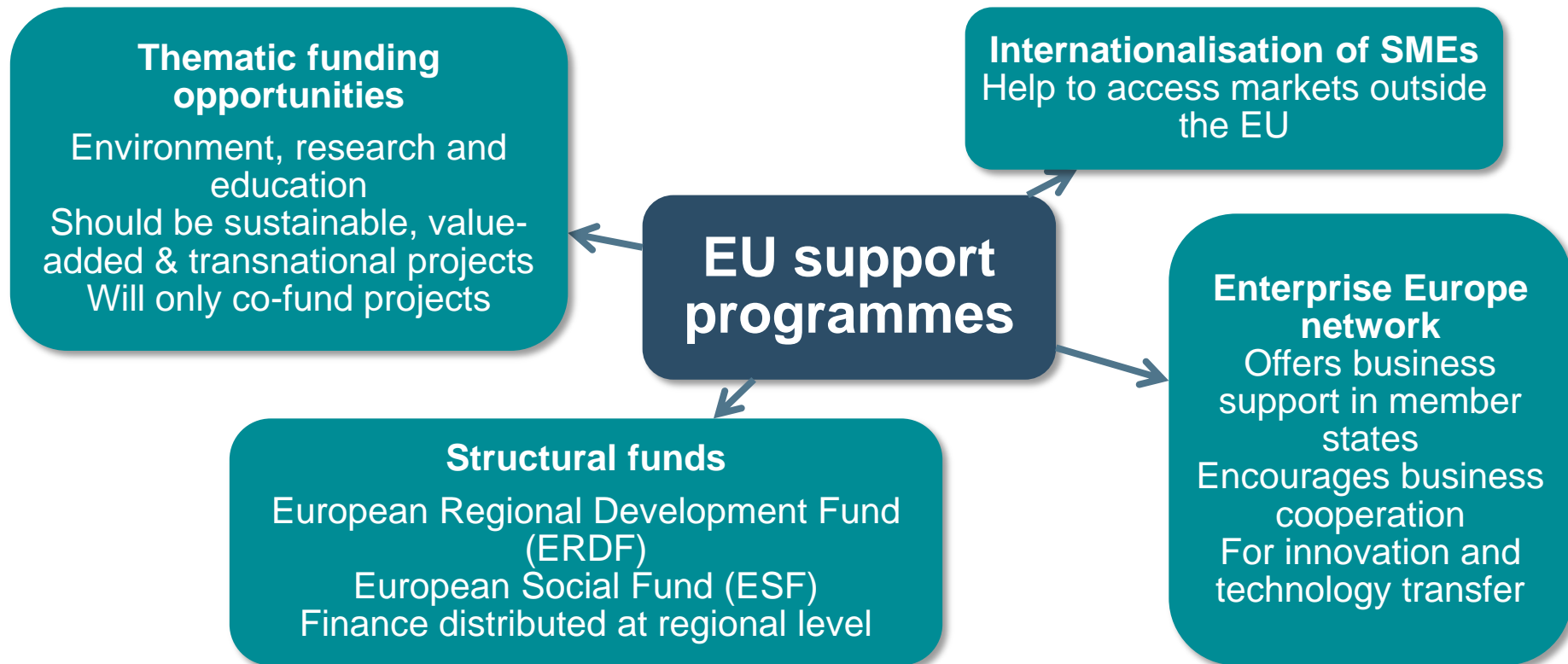
Venture capital company
Business angels
Overseas investment
Multinational company



Main EU support programmes 1

- Financial support: grants, loans and guarantees
- Advisory support: handling regulation and access to export markets

Main EU support programmes 2





Horizon 2020

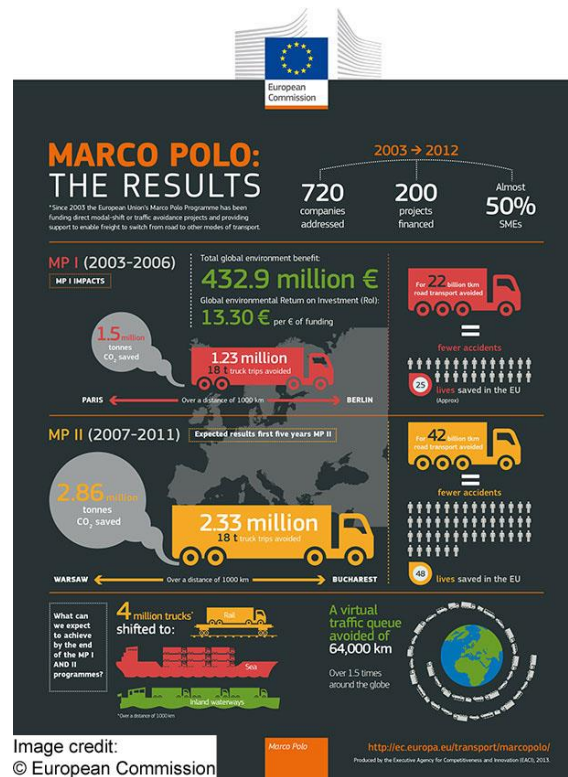
For research and technological development:

VIDEO

<http://bit.ly/1W0H4PZ> - Horizon 2020 General overview

Marco Polo programme

The aim is to improve environmental performance through an efficient and sustainable transport programme





Exports

% of UK registered businesses engaged in international trade, 2012

	Exports	Imports
Large (250+)	52.8	65.1
Medium (50-249)	41.8	47.7
Small (1-49)	11.8	11.4

Source: Office for National Statistics



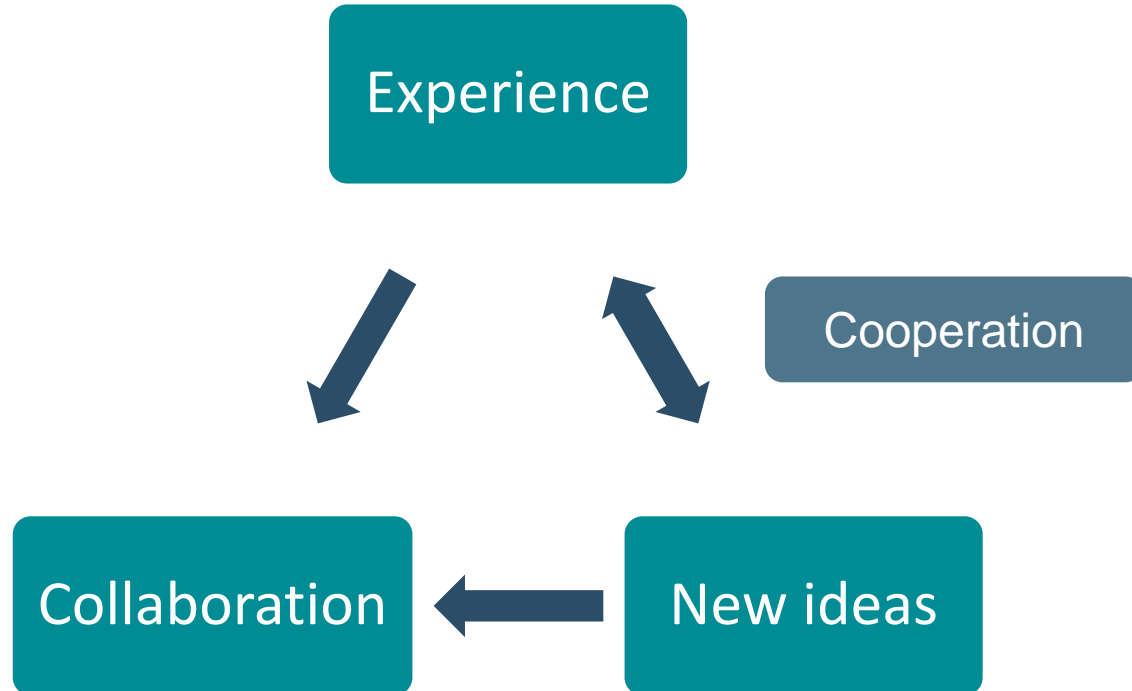
Erasmus for young entrepreneurs 1

- Time in another EU country* and learn from experienced entrepreneurs
- Placements are between 1 and 6 months
- There is no age limit

*also includes non-EU countries, such as Turkey, Iceland and Serbia



Erasmus for young entrepreneurs 2





Industrial cooperation programmes 1

EU-Japan industrial cooperation programme

- **Human resources training programme (HRTP)** managers from EU SMEs spend 5 weeks in Japan to learn Japanese language and culture, and to visit Japanese companies
- **Distribution and business practice (DBP)** 5/8 day mission to understand Japanese distribution system



Industrial cooperation programmes 2

EU-Japan industrial cooperation programme

- **Foreign direct investment (FDI)** 5 day mission for understanding how to start or grow a business in Japan by acquiring local assets
- **World class manufacturing (WCM)** 5/8 day mission for improvement of productivity and reduce costs, including a visit to Japan's most advanced factories



Summary

- SMEs are important for the UK economy and account for 60% of private sector jobs
- Companies which can be defined as SMEs are eligible for additional support from the UK government and European Union
- SMEs are categorised based on
 - The number of people they employed and
 - The turnover of the company or the balance sheet



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