

IdVector

Who can build the bridge to Europe's future? Only institutional investors



IdVector

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The largest economy in the world at a turning point

- Europe is the largest economy in the world representing a market of 500m citizens
- European countries had to take strong financial measures to protect their economies and their social cohesion during the 2008 banking crisis
- European countries associated with the IMF have now created a €750bn stabilisation facility to prevent any default in the Eurozone
- However to preserve their credibility in the long term, European countries have no option but to deliver on the EU 2020 objectives
- European economy must evolve to face the competitive pressures of emerging market companies. The only way to fuel long term growth is through Science and technology
- 2 futures are now foreseeable for Europe:
 - ▶ The vicious circle of low R&D investments
 - ▶ The virtuous circle of high R&D investments

The first economy in the world

	Europe	USA	Japan	China (PRC)
Population	501m	306m	127m	1,339 m
GDP (in bn)	18.394 \$	14.441 \$	4.356 \$	4.327 \$

Entering an era of belt tightening

Countries	Budget deficits (of GDP)	Austerity measures ⁽¹⁾
	<ul style="list-style-type: none"> ▪ 2009: 3.3% ▪ 2010⁽¹⁾: 5.0% ▪ 2011⁽¹⁾: 4.7% 	<ul style="list-style-type: none"> ▪ State pensions frozen ▪ Pension age will rise from 65 to 67
	<ul style="list-style-type: none"> ▪ 2009: 12.2% ▪ 2010⁽¹⁾: 11.2% ▪ 2011⁽¹⁾: 6.0% 	<ul style="list-style-type: none"> ▪ Ministerial salaries cut by 5% ▪ Public service employment freeze
	<ul style="list-style-type: none"> ▪ 2009: 11.2% ▪ 2010⁽¹⁾: 9.3% ▪ 2011⁽¹⁾: 6.0% 	<ul style="list-style-type: none"> ▪ Public sector pay cut by an average of 5% from June ▪ Salaries frozen in 2011 ▪ Baby cheque to be abolished
	<ul style="list-style-type: none"> ▪ 2009: 9.4% ▪ 2010⁽¹⁾: 7.3% ▪ 2011⁽¹⁾: 5.1% 	<ul style="list-style-type: none"> ▪ Public sector wages frozen for four years (2010-2013)
	<ul style="list-style-type: none"> ▪ 2009: 7.5% ▪ 2010⁽¹⁾: 8.0% ▪ 2011⁽¹⁾: 6.0% 	<ul style="list-style-type: none"> ▪ State spendings will be frozen at inflation from 2011-2013 ▪ Deceleration of social spendings from 3% to 2.8% by 2012

⁽¹⁾ As of May 24, 2010

Europe is at a turning point

Financial & economic crisis



Stresses short terms constraints...

...Leaving no budget to fund long term growth...

...Nevertheless, long term R&D investment is one of the key to exit the crisis

Therefore Europe is at a turning point

Low R&D investments

Vicious circle of R&D investment

Sluggish growth

Innovative financing solutions for R&D

Virtuous circle of R&D investment

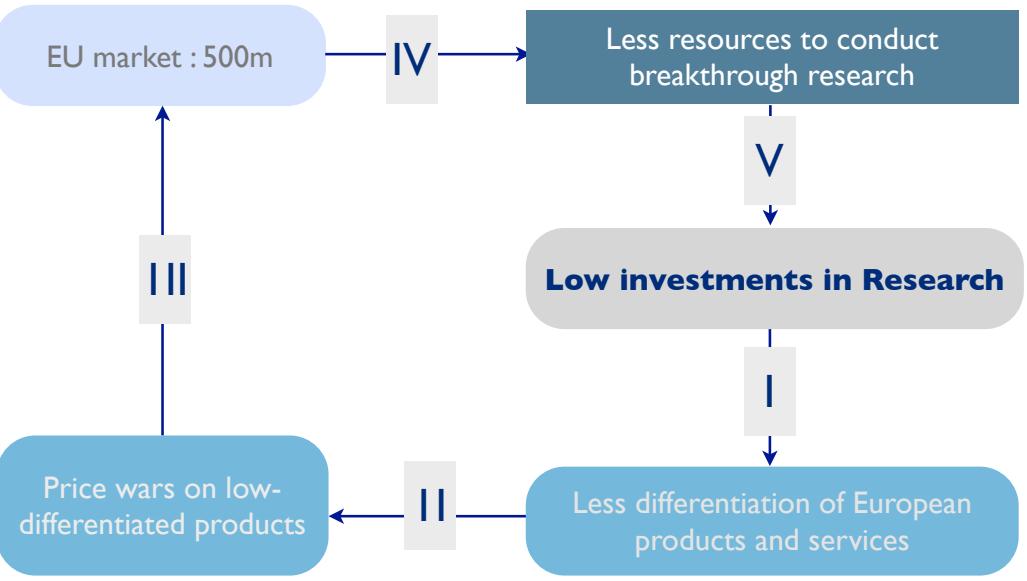
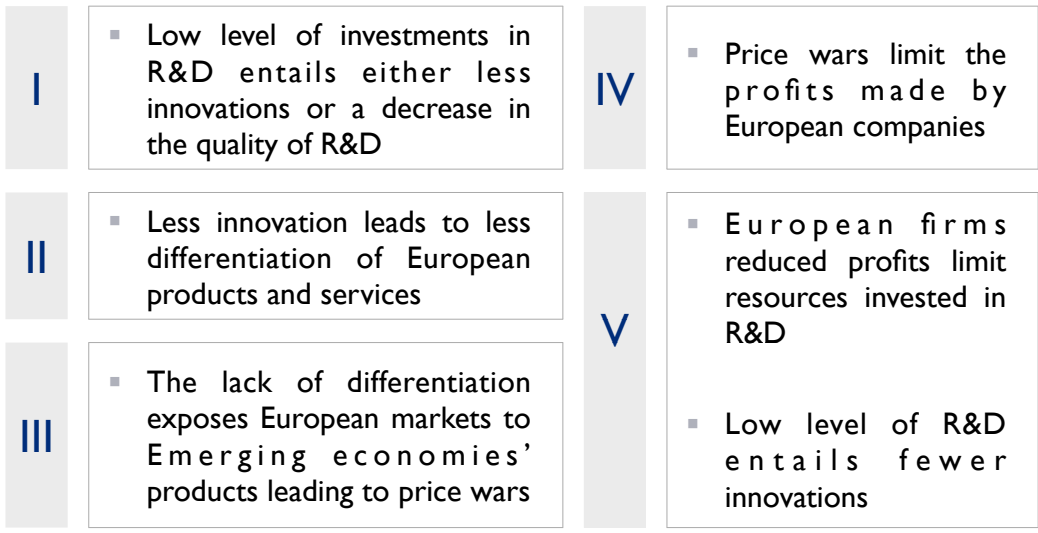
Strong growth

The danger of R&D under-investment for Europe

- Europe's R&D intensity, the proportion of its GDP invested in R&D, is lower than that of its peers
- The EU 2020 R&D intensity target set in 2010 to create "the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth" was fixed at 3% of Europe's GDP. That represents a €135bn gap with current investments
- Financial constraints have prevented European countries from reaching this goal thus posing a serious threat to the European economies, triggering a vicious circle of low growth

A low R&D intensity				
% of GDP	EU-27	USA	Japan	China (PRC)
R&D investments	1.8	2.6	3.4	1.3
CAGR 2000-2006	0.82%	-0.53%	2.04%	7.39%

The vicious circle of R&D underinvestment

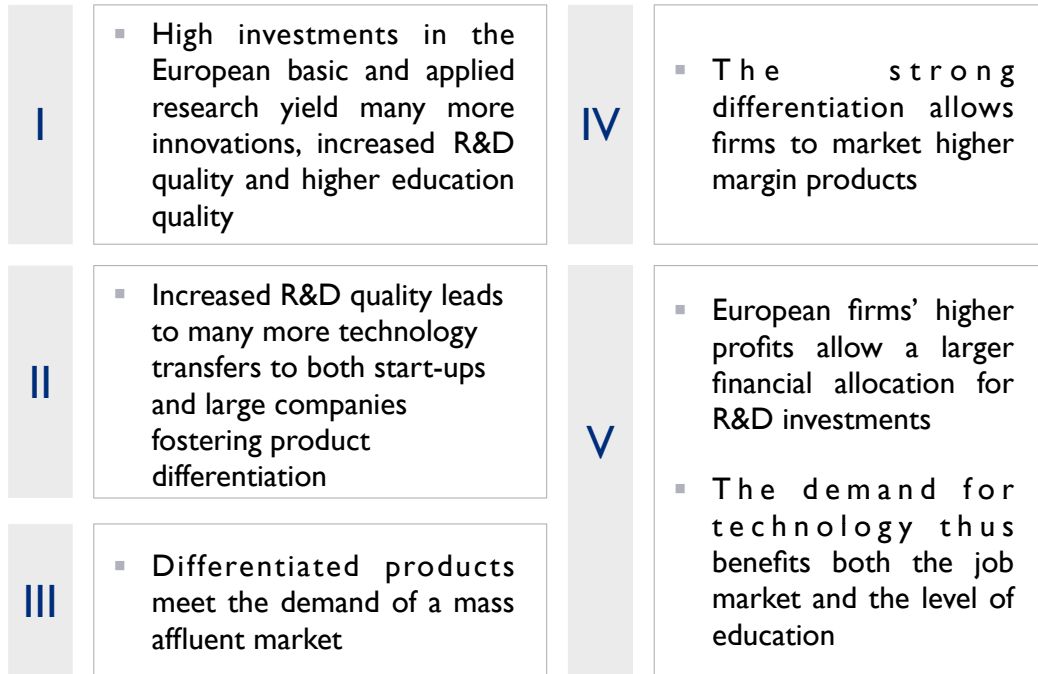


The potential virtuous circle of high R&D investment

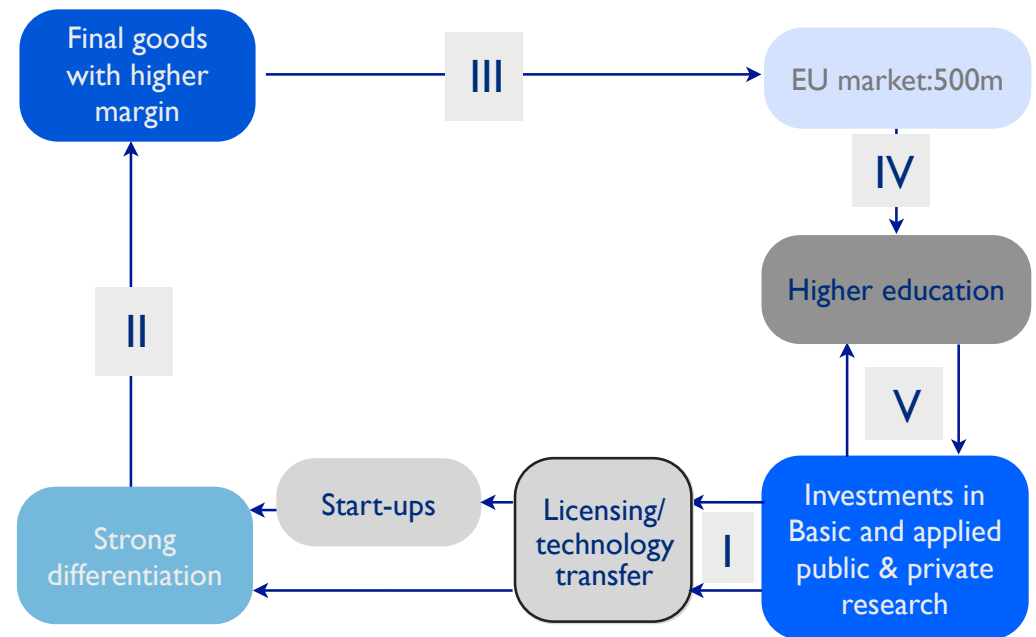
- Compared to the rest of the world, Europe is a market of mostly affluent and educated people with the second GDP per capita
- Based on European academic excellence, differentiated technologies produced by sophisticated workers would better answer the needs of more than 500m of demanding consumers, triggering a virtuous circle

800 years of excellence in scientific education and discovery

Name	Date of creation
 University of Bologna	1158
 Cambridge University	1209
 University of Salamanca	1218
 Oxford University	1231
 La Sorbonne	1257

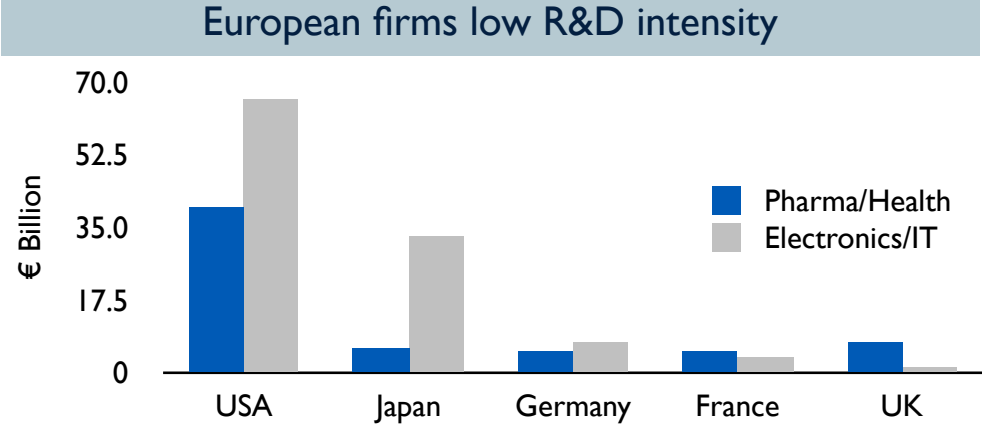


The R&D investment virtuous circle



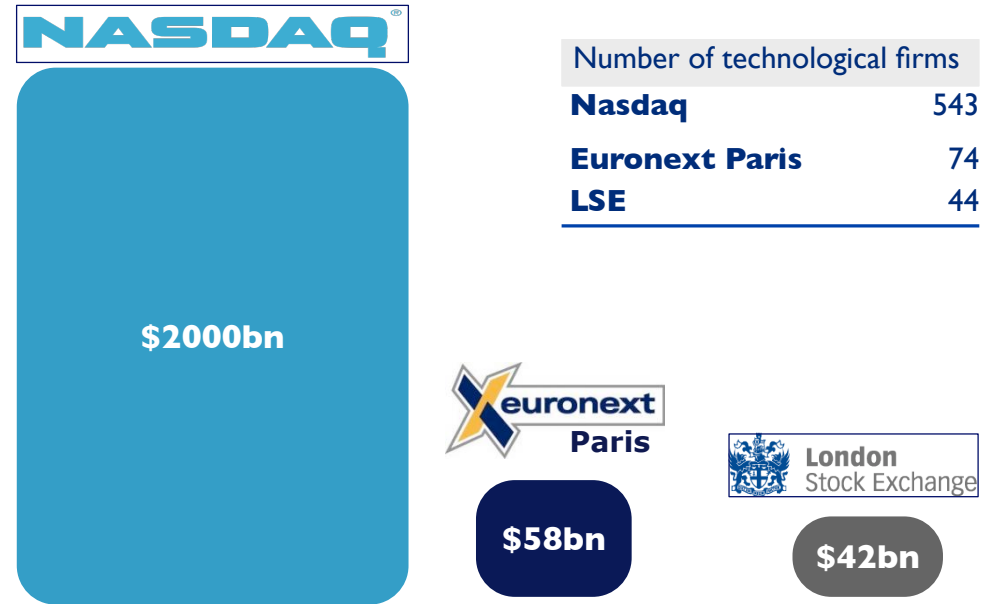
Who is going to finance long term growth?

- To reach the EU 2020 objective of 3% of GDP invested in R&D, €135bn per year must be found
- European states are too financially constrained by short-term needs to fund the gap
- Europe is at a turning point and needs to find a solution to finance its long term growth
- Entrepreneurship is growing in Europe but is not yet a vector to foster R&D investments on the scale of €135bn per year
- All large firms require earnings predictability. This limits the growth of R&D investments with their large upfront expenses, uncertain revenues and timing risks. Moreover in Europe, only a small number of large firms operates in sectors of high R&D intensity
- So an alternative source of financing must be found



World's top 1250 R&D-active companies' yearly R&D expenditures
 Source: UK DTI 2006 R&D Scoreboard

No exit opportunity for private funds in Europe



Source: Market cap of technological firms in the Nasdaq, LSE and Euronext Paris, Capital IQ/FT

Science & Technology cash flows: An appropriate asset class

- This source comes from institutional investors
- To invest the money they have been entrusted with, institutional investors are required today to find alternatives to the equity market
 - ▶ To comply with Solvency II and Liability-Driven Investments
 - ▶ To reduce their volatility exposure
- Science and technology royalties represent a strong opportunity for institutional investors.
- Large firms are keen to develop partnerships with academic institutions which will accelerate royalty growth
- Royalty flows have tripled in ten years and continue to grow around the world

Science and technology assets characteristics	
Assets	Revenues from intellectual property assets
Status	Cash-flow producing assets
Underlying assets	Royalty streams (patents, software licensing)
Deal	Purchase of licensing revenues over defined period
Risk/reward profile	<ul style="list-style-type: none"> - Limited principal exposure - Upside potential - Partial inflation protection
Exit mechanism	No exit mechanism required - Cash flow purchase
Correlation	Low correlation to financial markets

Science & Technology assets: a strong opportunity for useful finance

- Research organisations are looking for alternative sources of funding since public authorities are more constrained by short-term requirements of developed economies
- The R&D revenues market will enable R&D centres to fund their existing and future R&D programs through royalty based financing. Such funding exists in North America
- Although this alternative asset class may seem difficult to grasp for non-specialists, its financial characteristics are attractive to long term investors
- It is a huge opportunity for useful finance with a positive impact on health, environment and bringing useful innovations to mass markets

