

# THE CONTRIBUTION TO THE UK ECONOMY OF COMPANIES USING VENTURE CAPITAL AND BUSINESS ANGEL FINANCE: AN UPDATED ANALYSIS

A PowerPoint report prepared for the BVCA

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# INTRODUCTION

- Oxford Economics has estimated the economic impact for the UK of companies using venture capital ("VC") and/or business angel finance in 2018.
- This updates the results of a previous study, published in 2017 and relating to 2015.
- Estimates of the numbers and characteristics of these companies draw on the results of Small Business Surveys conducted for the Department for Business, Energy & Industrial Strategy (BEIS), as well as other datasets and information.
- Estimates of the contribution of these businesses to UK turnover, GDP and jobs have then been derived.
- Finally, further "knock-on" impacts for the rest of UK economy have been calculated, relating to purchases of goods and services by the businesses, and by workers in both those enterprises and their UK supply chain.



## **USERS OF VC AND ANGEL FINANCE: NUMBERS AND TURNOVER**

Some 21,200 enterprises were using business angel and/or venture capital finance in 2018, with a combined turnover of £36.5 billion.



- There were more users of angel finance than VC users, but as in 2015 VC users had a much higher turnover in aggregate.
- The total turnover value was greater than that of the UK mining sector, including oil and gas extraction, and that of the UK road freight transport industry.



## **USERS OF VC AND ANGEL FINANCE: GDP AND JOBS**

This turnover allowed the sector to generate £19.7 billion worth of Gross Domestic Product (GDP), supporting over 220,000 jobs.



- GDP is the sum of staff costs, capital costs and net profits, or, in broad terms, the difference between sales revenues and the cost of purchases from other businesses.
- The value is nearly three times the flow of VC and angel finance sustaining the companies' activities in 2018, of £6.8 billion.



## SIZE CHARACTERISTICS OF VC AND ANGEL FINANCE USERS

Businesses with fewer than 50 employees dominate VC and angel finance use. But there has been a shift up the "size scale" since 2015.



- Between 2015 and 2018, use shifted away from "micro" businesses with fewer than 10 payroll staff, towards "small" companies with 10-49 employees.
- As a result, average employment per company (employees plus working proprietors) grew from around eight to around 11 between those two years.



# **BROAD SECTORAL CHARACTERISTICS**

Digital, biotech, and financial services companies stand out as intensive users of venture capital and business angel finance.



- 43% of VC users are in the "digital" sector, providing computing, telecoms or information services.
- That contrasts with their 7% share of the overall UK business population.
- Health & biotech, and financial services, are also 'over-represented' amongst users of this type of finance.



# IMPACT OF THESE CHARACTERISTICS ON PRODUCTIVITY

These characteristics mean that the typical VC-using business is significantly more productive per worker than average.



- On this basis, GDP per job is 60% above the private sector average, due to the type of work undertaken.
- The companies' productivity may well be higher still in practice, due to specific benefits of the VC-related "innovation eco-system", but any such impact cannot be captured in a study of this nature.



# HOW THE SECTOR BENEFITS THE REST OF THE UK ECONOMY

Purchases by VC- and angel finance-using enterprises, and by their workers, provide additional support to economic activity in the UK.





## ESTIMATE OF THE TOTAL IMPACT ON THE ECONOMY

Taking the "indirect" and "induced" channels into account too, the impact on GDP is nearly double that of the "direct" impact alone.



- The total contribution to GDP is £37.7 billion, i.e. over five times the £6.8 billion flow of VC and angel funding in 2018.
- The 570,000 total jobs contribution matches the number of workers across all UK road and rail transport services, including both passenger and freight transport.



# HOW THE TOTAL UK GDP IMPACT SPREADS ACROSS THE SECTORS

The total GDP impact is spread across a wide range of sectors, and is not confined to activities that are themselves significant VC users.



- Digital, and the large business services sector, are significant VC users, and also benefit most from this finance across all three channels of impact.
- But consumer goods & services, and transport, gain disproportionately from VC-related supply chain and employee spending effects.



# CONCLUSION

- Some 21,200 companies used venture capital and/or business angel finance in 2018. Between them they had a turnover of £36.5 billion, supporting £19.7 billion of Gross Domestic Product and 220,000 jobs.
- This turnover exceeds that of the UK mining sector (including oil & gas extraction), and that of the UK road freight transport industry.
- The GDP figure is nearly three times the flow of VC and angel investment into UK companies, of £6.8 billion in 2018.
- The vast majority of VC and angel finance users have fewer than 50 staff, but the average size of these enterprises looks to be increasing.
- Compared with businesses in general, these enterprises are more likely to deliver digital, biotech, or financial services, supporting high productivity.
- Taking supply chain and staff spending impacts into account too, the total impact on UK GDP is £37.7 billion. This supports 570,000 jobs, which matches the number of jobs in the road and rail transport services sector.



# **SUMMARY METHODOLOGY (1)**

- 1. Percentages of companies currently using business angel and/or equity finance were taken, for each broad size band and sector, from the 2018 BEIS Small Business Survey, by combining the answers to two questions (on finance use and type of equity provider).
- These figures were combined with results from the 2016 and 2017 surveys, data on companies by size and sector from the BEIS Business Population Estimates, and information on VC use by size and sector provided by the BVCA, to arrive at estimates of the number of SMEs and larger businesses using these sources of finance, by sector and size band at a more refined level.
- 3. The turnover and employment of these VC and angel finance users was then estimated by assuming that, for each "size x industry" category, turnover and jobs per business matched the respective averages for that category in the Business Population Estimates.
- 4. The GDP of these companies was estimated from turnover, using the GDP-to-turnover ratios found for each separate industry in the National Accounts published by the Office for National Statistics (ONS).

Due to the nature of the estimation process, the results shown here, and in the previous exercise in 2017, should be considered to be approximations of the true picture.



# **SUMMARY METHODOLOGY (2)**

- 5. Purchases from other businesses the difference between turnover and GDP were split between imports and domestic spending, with domestic spending then split by sector of supplier, using ratios in the National Accounts.
- 6. This spending pattern was combined with further National Accounts ratios, concerned with transactions between different UK industries, to arrive at "indirect" GDP, i.e. GDP in the UK supply chain supported by the finance users' purchases. GDP supported by the spending of supply chain workers part of the "induced" impact was estimated as part of the same process.
- 7. The finance users' own GDP was split between staff take-home pay and other elements (gross profits, income tax, NICs, pensions) using ratios from the National Accounts, with the resulting staff spending then split between consumer taxes, imports and payments received by UK suppliers. This last element was split by industry of supplier, with the remaining part of "induced" GDP derived from there.
- 8. Indirect and induced jobs were derived from indirect and induced GDP respectively, using ratios implied, for each separate sector of industry, by ONS National Accounts and labour market statistics.

Differences in the total GDP and jobs impacts, between the 2017 report and this one, will reflect improvements in the modelling as well as changes in the true picture.



### **DECEMBER 2019**

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