Banks as Equity Investors

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October 2022

This Version: January 15, 2023

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Abstract

This paper examines the relationship between bank-affiliated venture capital (BVC) and the diffusion of venture capital in the European market. It uses macroeconomic and institutional factors to document whether BVCs are more involved in markets that may not be favourable for independent venture capitalists. The study also investigates whether the presence of BVCs is associated with improved conditions in current and future rounds of funding. Results suggest that while BVC investments are related to bigger rounds in terms of the amount invested, there is no evidence of their ability to attract new investors in the following round. The paper adds to the existing literature by using data from European countries to explore the role of banks in venture capital markets and to assess whether their involvement can improve investment conditions.

Keywords: Venture capital, Banking, Early-Stage Financing

JEL Classification: G21, G24

1 Introduction

It has been believed for decades that the structure of capital markets strongly impacts the diffusion of Venture Capital. Black and Gilson (1998) discuss how bank-centred capital markets are less attractive for VCs since they make IPOs less likely, which results in a less optimal investment structure for both parties. Nevertheless, as banks are the dominant financial institution in most countries (Allen and Gale (2001)), policymakers in many countries want to develop their venture capital market relying on their incumbent banks for the task. However, the US experience suggests that banks may prefer to be followers rather than leaders in the venture capital market, as they are driven by strategic objectives.

We add to this discussion in two ways. Firstly, we use the differences in macroeconomic and institutional factors across European countries to document whether banks are more involved in VC markets that would normally not be considered favourable for independent VCs. In particular, we look for the possibility that bank-affiliated funds can hold a large share of VC investments in settings in which asymmetric information is a more severe problem due to the absence of a strong shareholder protection legal framework. Although our findings are preliminary, we do not observe clear characteristics associated with a stronger activity of BVCs, except for certain deal characteristics. Secondly, we investigate whether the presence of a BVC is associated with an improvement in both current and future rounds conditions. We highlight how banks tend to invest in syndicates and companies backed by BVC receive funding from a larger number of investors during their life, but we do not find any evidence of their ability to attract new investors in the following round. On the contrary, BVC investments are strongly related to bigger rounds in terms of the amount invested, and this effect is economically significant even in the rounds after the one in which the bank took part.

Banks have been making private equity investments for decades, oftentimes exploiting regulatory loopholes (universal banks were formally allowed to invest in startups in 1999, after the passage of the Gramm-Leach-Bliley Act). Fang et al. (2013) report that bank-affiliated private equity groups accounted for 30% of all private equity investments in the US market in the period 1983-2009. Hellmann et al. (2008) document 24,659 venture capital deals in 10,578 companies in the period 1980-2000, 9% of which have been conducted by a bank-affiliated fund

Why do banks invest in venture capital and private equity? Although there is no clear answer, several ideas have been brought forward to explain it. One plausible reason is that bank-affiliated equity investments could reflect managers' incentives to grow revenues and maximise volatility. On the other hand, through investments banks obtain private information that can be valuable in other transactions. On On a similar note, the investments could be justified based on the information acquired during previous banking relationships with the target firms. Banks act as strategic investors, in the sense that they target companies in which there are complementarities with their core business (Hellmann (2002)). For banks, the main complementary asset is their lending expertise, which may be of future interest to the portfolio. As documented by Hellmann et al. (2008), forging a relationship with a company at the venture capital stage increases the probability that a bank subsequently gets to grant a loan to that company.

Recently, banks' role in venture capital markets has been considered in relationship with the degree of development of the area in which they are active. The idea is that financial intermediaries are acting as VCs in markets in which there is a scarcity of independent venture capitalists. Condrea (2022), looking at different US states, documents banks' role as "anchors", as they can attract a larger round of financing after their initial commitment to a firm. This role is particularly critical in areas under-served by traditional VCs, in which banks can provide financing to young firms. Moreover, in this setting banks act also as deep-pocket investors, further reducing firms' risk of not being able to scale up due to the lack of funding. Lastly, banks are also less sensitive to fluctuations in the financial markets, so their commitment to their portfolio firms is longer.

We first examine the investments made by VC funds in 27 European countries in the period 1998-2018. In particular, we try to predict the probability that a bank-affiliated fund is involved in the deal by using round-level and country-level characteristics. As the presence of VCs is the result of their fundraising activity, we focus on the determinants associated with it. Gompers and Lerner (1999) study the US market from 1972 to 1994. They find that shocks on the demand side of VC funds, such as a decrease in capital gains tax rates, are associated with greater venture capital commitments. Similar effects on fundraising by VC are linked to a positive economic trend and to an increase in R&D expenditures. Schertler (2003) focuses on 14 European countries and identifies three factors that explain VC investments in early-stage companies, namely human capital endow-

ments, the liquidity of the stock market, and the labour market rigidities. However, these factors are not relevant when looking at expansion-stage investments as a more general definition of venture capital. Similarly, Romain and de la Potterie (2004) develop a theoretical model to understand the determinants of VCs activity based on economic growth, interest rates, and several proxies for the entrepreneurial environment.
Drawing from this vast literature, we base our predictive model on several factors designed to capture the financial development, the legal framework, and the entrepreneurial environment of each country. Our findings support the view that bank-affiliated funds investments are positively associated with a period of expansive monetary policy, while other macroeconomic factors have a minor impact. On a similar note, investments are more likely to happen where the legal framework offers greater protection to investors. Lastly, BVCs investments are positively associated with countries with lower costs to start a business, but a higher number of procedures.

In the second part of the paper, we focus on how the presence of bank-affiliated investments can affect the rounds a company receives. This section start from one of the research questions raised by Condrea (2022) and expands on it to provide a more clear picture of the role that BVCs might have in the success of their portfolio companies. Although our results do not confirm the "anchoring" role in terms of additional investors, we document how bank-backed companies still receive financial support from a larger number of investors compared to other VC types and both the rounds in which they take part and the following rounds have a significantly bigger amount invested. We then show how bank-affiliated funds do not follow the most active VC funds in their investments and that the positive effects attributed to the BVCs' involvement are not caused by the presence of other successful investors in their syndicate. Moreover, the most active VC funds are only associated with a positive effect on the number of investors in the same round in which they took part, while they fail to attract additional investors in the following rounds and to provide more funding to their portfolio companies.

After presenting the main data used in Section 2, in Section 3 we introduce and discuss each factor selected and the papers that prove its importance in the VC context. In the last subsection, we present the results of our analysis in detail. Lastly, in Section 4 we explain how our setting differs from the one in Condrea (2022) and how we try to address the effect of banks at different stages. At the end of this section, we present the results dealing with the most active VCs.

2 Data

The data used in this paper are extracted from the VICO dataset (version 5.0). It includes data on entrepreneurial companies operating in 27 European countries (plus the United Kingdom and Israel) which received at least a financing round from a VC fund in the period 1998-2018. All companies included in the VICO dataset were: i) founded starting from 1988; ii) were independent at the foundation (i.e. not controlled by other business organizations); iii) operate in medium and high-tech manufacturing and service industries.

Initially, we drop all the observations that have key variables missing, such as `CompanyNation`, `InvestorType`, `InvestorNation`. This leaves us with 54,313 observations, of which 3,693 (6.80%) are bank-affiliated funds equity investments. Following Hellmann et al. (2008), we define a deal as the combination of company-investors, therefore each investor can invest only once in a given company. Syndicated deals have as many rows (observations) as the number of unique investors that take part in them. This requirement is very stringent but it is necessary to avoid the potential bias deriving from staged investment, as it is not possible to disentangle multiple independent rounds from the payment of several tranches in a single funding round. The number of unique deals is 35,860, of which 2,834 (7.90%) are related to bank-affiliated investments. The next step is to compress syndicated rounds into a single observation to not have duplicated information for some companies. In the end, we are left with 26,492 observations/rounds, of which 2,663 (10.05%) have at least a bank-affiliated investor involved.

Out of 26,492, only 1,557 (5.88%) deals have more than a half of investors from the same country as the target company, while 19,418 (73.3%) deals have at least one investor (but less than 50% of the total investors involved in the round) from the same country of the target company. Syndicated deals account for 6,007 (22.67%) deals, while deals that involve at least an investor from outside the EU (and the UK) are 4,396 (16.59%). The average number of investors per round is 1.35 as 20,485 (77.33%) rounds have only one investor involved. Moreover, on average companies received funds from 1.56 investors during their life as 16,085 (60.72%) did receive only one round from a single investor.

From Table 2 we can see how heterogeneous the presence of bank-affiliated funds is across

Table 1 — Descriptive Statistics

	1998-2018	2007-2018		1998-2018	2007-2018
BVC_d (1/0)	0.10	0.08	VCs	1.78	1.78
	(0.30)	(0.27)		(1.35)	(1.33)
BA_d (1/0)	0.09	0.12	CountryVCs	177.68	210.00
	(0.28)	(0.32)		(156.78)	(170.60)
$Syndicate_d$ (1/0)	0.23	0.24	CountryBVC	12.66	11.90
	(0.42)	(0.43)		(11.07)	(9.19)
$MostlyDomestic_d$ (1/0)	0.06	0.06	$Investors_R$	1.35	1.38
	(0.24)	(0.24)		(0.81)	(0.82)
$WeaklyDomestic_d$ (1/0)	0.73	0.75	$ExtraEU_d$ (1/0)	0.17	0.15
	(0.44)	(0.44)		(0.37)	(0.36)
Observations	26,492	17,518		26,492	17,518

Each observation refers to a single round, syndicated rounds' information where collapsed in a single line. Assign proper names and describe variables.

European countries. Looking at the three most developed VC markets in Europe (France, Germany, and the UK) we can see how banks tend to be involved in 10% of the overall rounds, while this number is drastically lower when looking at the Nordic countries (around 3%).

Finally, Table 3 highlights the distribution of VC investments across different sectors using the Fama and French 49 industry classification. Maybe surprisingly, it does not appear to be any statistically significant difference in how investments are distributed between BVC and non-BVC rounds.

Table 2 — Countries

	1998 - 2018			2007 - 2018		
Country	Rounds	BVC	Freq.	Rounds	BVC	Freq.
Austria	338	30	8.9%	220	4	1.8%
Belgium	648	94	14.5%	402	31	7.7%
Bulgaria	135	2	1.5%	.	.	.
Croatia	37	7	18.9%	.	.	.
Cyprus	53	5	9.4%	.	.	.
Czech Republic	114	3	2.6%	85	1	1.2%
Denmark	647	23	3.6%	293	6	2.0%
Estonia	121	3	2.5%	108	2	1.9%
Finland	1,038	27	2.6%	583	15	2.6%
France	5,008	732	14.6%	3271	441	13.5%
Germany	3,920	398	10.2%	2666	211	7.9%
Greece	53	15	28.3%	24	3	12.5%
Hungary	317	20	6.3%	248	14	5.6%
Ireland	689	89	12.9%	268	26	9.7%
Italy	802	115	14.3%	571	53	9.3%
Latvia	125	1	0.8%	97	.	.
Lithuania	92	8	8.7%	80	1	1.3%
Luxembourg	61	9	14.8%	35	3	8.6%
Malta	16	.	0.0%	.	.	.
Netherlands	1,160	65	5.6%	790	35	4.4%
Poland	511	4	0.8%	431	1	0.2%
Portugal	282	45	16.0%	169	21	12.4%
Slovakia	54	1	1.9%	38	1	2.6%
Slovenia	29	2	6.9%	.	.	.
Spain	1,528	194	12.7%	1132	156	13.8%
Sweden	1,376	54	3.9%	997	23	2.3%
United Kingdom	7,338	717	9.8%	5010	382	7.6%
Total	26,492	2,663	10.1%	17,518	1,430	8.2%

Each observation refers to a single round, syndicated rounds' information where collapsed in a single line. Assign proper names and describe variables.

Table 3 — FF49 Distribution

FF49	BVC	Non-BVC	t-test on %	Cont.d	BVC	Non-BVC	t-test on %
Agriculture	3	59	-0.03	Precious Metals	2	2	0.01
Food Products	16	166	-0.02	(Non) Metallic Industrial Mining	35	231	0.07
Tobacco Products	35	235	0.07	Petroleum and Natural Gas	1	21	-0.01
Recreation	0	1	0.00	Utilities	10	62	0.02
Entertainment	23	237	-0.02	Personal Services	393	3027	0.47
Printing and Publishing	11	153	-0.04	Business Services	45	418	-0.01
Consumer Goods	7	83	-0.02	Electronic Equipment	0	3	0.00
Apparel	14	67	0.05	Measuring & Control Equipment	10	42	0.04
Healthcare	6	32	0.02	Business Supplies	65	429	0.14
Pharmaceutical Products	1	8	0.00	Shipping Containers	18	248	-0.07
Chemicals	39	247	0.09	Transportation	190	1166	0.48
Rubber and Plastic Products	1	19	-0.01	Wholesale	7	26	0.03
Textiles	8	106	-0.03	Retail	59	477	0.05
Construction Materials	31	447	-0.14	Restaurants, Hotels, Motels	153	1276	0.10
Construction	5	80	-0.03	Banking	60	499	0.04
Steel Works Etc	3	39	-0.01	Insurance	59	1120	-0.49
Machinery	19	143	0.03	Real Estate	7	24	0.03
Electrical Equipment	0	7	-0.01	Trading	445	5418	-1.14
Automobiles and Trucks	0	14	-0.01	Almost Nothing	567	4799	0.31
Total	2,348	21,431			2,348	21,431	

Each observation refers to a single round, syndicated rounds' information where collapsed in a single line. Assign proper names and describe variables.

3 Country-level Factors and the Share of BVC Investments

Venture Capitalists are sophisticated investors, as such, it is reasonable to assume that they have a clear idea of the socioeconomic environment of the countries in which they are active. However, a successful domestic venture capital market is based on both a funded supply side and an innovative demand side. On the one hand, VCs are more active in financially developed financial markets, where it is easier to raise funds and there is strong shareholder protection. On the other hand, capital markets need a pool of innovative small and medium enterprises to provide constant IPOs and profitable investment opportunities. However, there is a gap in the literature on what are the reasons behind the activity of bank-affiliated funds in the venture capital markets and what could be the causes of the heterogeneity observed in the European VC markets. On the one hand, the most simple explanation could be that BVCs are more relevant in countries without a strong independent VC market and this might explain the high presence in Mediterranean countries. However, the biggest difference is not between developed markets and undeveloped markets but between southern countries and northern countries and, to some extent, between western countries and eastern countries. On the other hand, banks might be more active in countries with weaker investor protection laws as they could rely on private information gained through their credit activity to screen firms more accurately.

To understand VCs' investment decisions, it is important to disentangle the components of each country's socio-economic environment, as countries have followed different strategies to promote their economies. There is florid literature on how countries' characteristics affect financial intermediaries, such as venture capitalists and banks, and this section is strongly influenced by it. While it is difficult to know which paper first introduced a set of controls, we are mainly referring to the following ones: Hellmann et al. (2008), Groh et al. (2010) Cuadros-Solas et al. (2022), and Bellavitis et al. (Forthcoming).

One of the main issues we have to face is dealing with overfitting and multicollinearity. In an effort to explain a characteristic as clearly as possible, authors have proposed a variety of indicators that are strongly correlated with each other. Initially, we gathered as many resources as we could and then we rely on a lasso selection algorithm to choose the best option whenever we have multiple suitable variables to capture the effect of the same characteristic. In the following subsection, we introduce the factors selected.

3.1 Factors

3.1.1 Deal Factors

VCs investors are not a homogeneous category, they are characterised by different preferences based on their main type of funding and their degree of specialisation. While some VCs might be interested in being the first to invest in a company and enjoy fully the possible profits, others might be less risk inclined and prefer to invest in companies that have already been backed by VCs.

Some of the variables are designed to describe how the target company looked before the current round. In particular, BA_d is a dummy indicating whether the company already received backing from Business Angels, BVC_{R-1} measures the number of bank-affiliated funds that backed the company in the previous rounds, and $First$ measures the year passed from the first investment received by the company.
The other characteristics we consider are whether the round is syndicated ($Syndicated_d$) and how many investors were involved ($Investors_R$), whether the round has at least 50% domestic VCs ($MostlyDomestic_d$) or at least one but less than 50% ($WeaklyDomestic_d$), and whether the round involved a VC fund based outside Europe ($ExtraEU_d$). Lastly, we control for the number of active VCs and BVC funds in each country-year.

3.1.2 Macroeconomic Factors

Countries' socio-economic characteristics play a key role in their ability to develop their financial markets and attract VC investors. As noted by Wilken (1979), countries' prosperity is often correlated with a high level of entrepreneurship as it facilitates the accumulation of capital for risky investments, which is the basis of VC activity. This intuition is found also in Gompers and Lerner (1999) and Romain and de la Potterie (2004), which report that VCs and PEs are more active in countries that tend to grow faster. The economic prosperity of a country is also connected with a more diffused social wealth, which can predict the presence of a domestic demand market for the companies products.

Following the literature, we measure the economic activity using both the natural logarithm of the GDP per capita ($log(GDPpc)$) and its yearly growth rate ($\Delta GDPpc$). We also consider the level of inflation using the annual growth rate of the CPI (ΔCPI) and, following Bellavitis et al. (Forthcoming),

the Central Banks policy rates. Data on GDP and CPI are gathered from the International Monetary Fund, while the Central Banks rate has been collected from BIS.[1,2]

3.1.3 Institutional Factors

Since La Porta et al. (1997), it has become apparent how much the legal environment of a country determines the amount of financing it receives from outside and the size of its capital market. Cumming et al. (2010), building on a previous paper, shows how cross-country differences in legal tradition and accounting standards have a significant effect on the governance of VC deals. There is a large number of studies that focus on the different aspects that can define a country's institutional and legal environment.

Drawing from the World Bank Doing Business Database, we use the legal rights ($LegalRights$) index to proxy the access to credit and the disclosure index ($Disclosure$) to measure the strength of the minority shareholder protection. Additionally, we measure the ability to enforce contracts referring to two scores: costs to enforce a contract ($Cost\_to\_Enforce$) and time to enforce a contract ($Time\_to\_Enforce$). [3] Lastly, we divide countries based on their legal tradition using a dummy variable equal to 1 if the country has a civil law system ($Civil_d$).

3.1.4 Capital Markets Characteristics

Black and Gilson (1998) build a strong case for the superiority of stock market-centred capital markets, as IPOs are crucial for the existence of VC markets. On the other hand, they recognise that capital markets are not the only thing that matters. Often countries lack strong secondary institutions, like banks willing to lend and proper financial incentives to entrepreneurs. Schertler (2003) shows that stock markets' liquidity, measured as market capitalization, is positively correlated with VC investments.

We refer to the Global Financial Development Dataset [4] to obtain the annual market returns ($MktRet$) and the volatility ($Volatility$) of the market, as well as the proportion of R&D expenses over GDP (RD_{GDP}). Initially, we considered also the market capitalization and the volume, both scaled by GDP

1. IMF Data, https://data.imf.org/?sk=4FFB52B2-3653-409A-B471-D47B46D904B5
2. BIS Data, https://www.bis.org/statistics/cbpol.htm
3. Doing Business, https://databank.worldbank.org/source/doing-business
4. World Bank, https://www.worldbank.org/en/publication/gfdr/data/global-financial-development-database

but they were not available for almost half of the sample. We tested whether their exclusion would have an impact on the results of our analysis but we found no reason to believe that.

3.1.5 Entrepreneurship Factors

In this section, I jointly consider those characteristics that can affect both the decision to become an entrepreneur and the decision to invest in private firms. Bruce and Gurley (2005) affirms that an increase in the personal tax rate increases the probability of becoming an entrepreneur. At the same time, Gordon and Cullen (2002) explain differences between personal taxes and corporate taxes can incentivise self-employment. For this section, we rely on data from the World Bank Doing Business dataset. In particular, we use the $TaxScore$ which is the average of the scores of the three categories related to the tax system (number of procedures, time needed to pay, and amount paid on taxes over profits). Similarly, we use the scores dealing with starting a business, such as the ones related to the number of procedures, the time needed and the cost. We also employ the insolvency score to measure how strong the legal system is in dealing with the insolvency of a debtor and what is the expected recovery rate and the expected time to recovery. Lastly, similarly to Bellavitis et al. (Forthcoming) we use the Google Trend values for the search "Venture Capital" to proxy the demand for venture capital in each country.

3.1.6 Banking Sector Factors

The last set of factors that are not commonly used in venture capital literature but that we refer to in our analysis deal with the national banking sector. While there is not a clear connection between the banking sector and venture capital activity, outside of the dichotomy between bank- and stock market-centred capital markets, the focus of the analysis is to better understand where banks stand in the VC market and, as such, it is relevant to consider also each country banking sector.
Starting from the variables available in the Global Financial Development Database, we select four variables that measure the type of banking sector, its profitability and its riskiness. $Traditional$ measures the share of income deriving from non-interest related activities, ROA is the return on assets, $Z - Score$ is a proxy for the probability of default of the banking sector, and $Capital_{RWA}$ is the ratio between capital and risk-weighted assets.

3.2 Hypotheses

While it is difficult to predict exactly how each factor would be able to explain the investment decisions of bank-affiliated funds, we still expect to see definite trends in the data.

H1. Banks are often described as followers, either because they invest in syndicates or because they invest in companies that have survived their early-stage phase. We believe that deal factors will have strong predictive power and that they will highlight BVC's tendency to invest in more mature companies.

H2. As we believe that BVCs are not affected differently in comparison with independent VCs by macroeconomic shocks, we do not expect to see most of the factors being relevant. However, we believe that banks are more sensitive to interest rate fluctuations.

H3. We expect banking sector factors to be highly relevant in predicting BVC activity, especially those variables that explain profitability and overall risk.

H4. Lastly, we expect banks to be less affected by weak shareholder protection laws as they can leverage their knowledge of small companies obtained through the lending channel.

3.3 Empirical Model

In Section 2 we have seen how banks seem to invest in the same industry as other VC types but their presence varies considerably across countries. The central question is what characteristics are associated with greater activism of bank-affiliated funds in the VC markets. While to our knowledge there is not a definitive answer in the literature, looking at the theory we assume there are some plausible hypotheses on what is driving banks' involvement. The first one is the most intuitive, which claims that banks are involved in a larger number of deals because there are fewer independent VCs in that market. Another assumption is that banks are more active in countries with weaker legal protection for investors, as they are less affected by asymmetric information since they can observe more closely companies that received loans from them. Our unit of analysis is round-company pairing, as each VC can invest in a given company only once and syndicated deals have collapsed to only one observation per round. Each company is a potential target for BVC as it received some

type of VC financing. To understand the potential drivers behind BVC investments we use a Probit regression model. The dependent variable is the dummy BVC_D, which indicates whether a round involves a bank-affiliated investor or not. The regression includes all the variables discussed in the previous section. Since we employ a large number of variables and the table would not fit on a single page, we present the results split into several tables. In the first three columns of each table, we test how stable the results are when we include round and industry fixed effects, while in the last three columns, we present the relative average marginal effects.

In Table 4 we report the results dealing with the deal factors. The probability of being backed by a bank-affiliated fund at the average value of all factors is 6.24%. However, most of the deal factors are dummy variables so it is better to consider their effect in the two possible scenarios. Bank-affiliated funds do not invest in the same type of companies which are usually financed early in their life by Business Angels. Looking at the dummy variable BA_d, the estimated probability goes from 7.51% to 1.19% if the company has received early financing from them. At the same time, BVC might prefer to invest in companies that have already received a financing round, as $First$ is positive, and that have been backed by another bank. In this case, the probability almost doubles, going from 6.18% to 11.86% if at least one bank-affiliated fund has invested in the same company before.
Focusing on the characteristics of the round, we can see that BVC are more likely to act in syndicates (5.54% vs 8.81%) with a larger share of investors from other EU countries (5.52% vs 6.64%). Lastly, BVC-backed rounds are more likely to happen in countries with a higher number of active BVCs, while the number of active VC funds is not statistically significant. A standard deviation increase (9) from the median number of active BVC (13) increases the probability from 6.67% to 11.13%.

The estimated coefficients for the Macroeconomic and Market factors are reported in Table 5. Surprisingly, bank-affiliated investments do not seem to be influenced by many macroeconomic factors such as inflation, GDP, and GDP growth. Nevertheless, the Central Banks policy rates are statistically significant in all the specifications of the model. If we decompose their effect in three, analyzing when they are below zero, between 0% and 3%, and above 3%, our results are consistent with the idea of Bellavitis et al. (Forthcoming) in the sense that central banks rate below zero is not a special case of low-interest rates. What we observe is that the probability of being backed by a bank-affiliated fund is extremely high during the period with negative interest rates (17.31%), while

Table 4 — Deal Factors

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	BVC_d (1)	BVC_d (2)	BVC_d (3)	Margins (1)	Margins (2)	Margins (3)
BA_D	-0.8214***	-0.8247***	-0.8207***	-0.1136***	-0.1141***	-0.1126***
	[-12.076]	[-12.274]	[-11.551]	[-12.004]	[-12.191]	[-11.484]
$Syndicate_D$	0.2418***	0.2410***	0.2671***	0.0335***	0.0333***	0.0366***
	[4.795]	[4.785]	[5.021]	[4.790]	[4.779]	[5.013]
$Investors_R$	0.1811***	0.1810***	0.1622***	0.0251***	0.0250***	0.0223***
	[7.210]	[7.220]	[6.141]	[7.218]	[7.226]	[6.148]
$MostlyDomestic_D$	-0.0871	-0.0868	-0.0467	-0.0121	-0.0120	-0.0064
	[-1.396]	[-1.389]	[-0.717]	[-1.396]	[-1.389]	[-0.717]
$WeaklyDomestic_D$	0.1274***	0.1290***	0.1127**	0.0176***	0.0179***	0.0155**
	[2.616]	[2.651]	[2.216]	[2.620]	[2.655]	[2.219]
$ExtraEU_D$	0.0416	0.0415	0.0410	0.0058	0.0057	0.0056
	[0.711]	[0.708]	[0.672]	[0.711]	[0.708]	[0.672]
First	0.0295***	0.0244**	0.0218*	0.0041***	0.0034**	0.0030*
	[3.547]	[2.029]	[1.727]	[3.542]	[2.029]	[1.727]
CountryVCs	-0.0005	-0.0005	-0.0004	-0.0001	-0.0001	-0.0001
	[-1.389]	[-1.420]	[-1.067]	[-1.389]	[-1.419]	[-1.066]
CountryBVC	0.0313***	0.0314***	0.0303***	0.0043***	0.0043***	0.0042***
	[5.939]	[5.967]	[5.523]	[5.925]	[5.952]	[5.508]
BVC_{R-1}	0.3578***	0.3674***	0.3156***	0.0495***	0.0508***	0.0433***
	[3.837]	[3.775]	[3.108]	[3.836]	[3.776]	[3.109]
Constant	-7.4120***	-7.3800***	-8.4827***			
	[-3.620]	[-3.603]	[-3.769]			
Observations	17,518	17,514	16,043	17,518	17,514	16,043
Round FE	No	No	No	No	Yes	Yes
FF49 FE	No	No	No	No	No	Yes
Pseudo R^2	0.0907	0.0909	0.101			

*Estimated Standard Errors adjusted for heteroskedasticity (robust), t-stat in square brackets. *** p<0.01, ** p<0.05, * p<0.1*

Table 5 — Macroeconomic and Market Factors

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	BVC_d (1)	BVC_d (2)	BVC_d (3)	Margins (1)	Margins (2)	Margins (3)
CB Rates	0.0562**	0.0565**	0.0455*	0.0078**	0.0078**	0.0062*
	[2.312]	[2.324]	[1.787]	[2.310]	[2.322]	[1.785]
ΔCPI	0.0195	0.0196	0.0164	0.0027	0.0027	0.0023
	[1.103]	[1.106]	[0.870]	[1.102]	[1.105]	[0.870]
ΔGDPpc	-0.2066	-0.2041	-0.0517	-0.0286	-0.0282	-0.0071
	[-0.803]	[-0.793]	[-0.188]	[-0.803]	[-0.793]	[-0.188]
log(GDPpc)	0.1751	0.1729	0.1331	0.0242	0.0239	0.0183
	[1.587]	[1.569]	[1.141]	[1.586]	[1.569]	[1.140]
Volatility	0.0080**	0.0079**	0.0107***	0.0011**	0.0011**	0.0015***
	[2.064]	[2.033]	[2.609]	[2.064]	[2.032]	[2.607]
MktRet	0.0003	0.0003	0.0009	0.0000	0.0000	0.0001
	[0.254]	[0.228]	[0.643]	[0.254]	[0.228]	[0.643]
R&D$_{GDP}$	-0.1533**	-0.1524**	-0.1814***	-0.0212**	-0.0211**	-0.0249***
	[-2.454]	[-2.445]	[-2.759]	[-2.454]	[-2.445]	[-2.759]
Constant	-7.4120***	-7.3800***	-8.4827***			
	[-3.620]	[-3.603]	[-3.769]			
Observations	17,518	17,514	16,043	17,518	17,514	16,043
Round FE	No	No	No	No	Yes	Yes
FF49 FE	No	No	No	No	No	Yes
Pseudo R^2	0.0907	0.0909	0.101			

*Estimated Standard Errors adjusted for heteroskedasticity (robust), t-stat in square brackets. *** $p<0.01$, ** $p<0.05$, * $p<0.1$*

the same probability decreases to 6.61% when interest rates are between 0% (not included) and 3%, to then rise again when interest rates are above 3% (10.23%).
Looking at the Market factors, we can see how the effect of annual market returns is not statistically different from zero. On the other hand, the volatility of the domestic stock market is statistically significant, but the economic magnitude is very limited, as a standard deviation increase from the median increases the predicted probability of just 0.60 percentage points (6.06 vs 6.66). Lastly, the coefficient for the ratio between RD spending over GDP is negative. However, the effect is mainly driven by extreme values on the right-hand side of the distribution, if we add a standard deviation to the median value we observe a decrease of 1.1 percentage point.

Table 6 displays the results for the Banking and Institutional factors. The coefficient for ROA is negative and statistically significant in all the specifications, implying that countries with a profitable banking system do not have as many VC investments from BVC. At the median level, the predicted probability is 6.24%, while a standard deviation increase (decrease) brings it to 5.64% (6.89%). At the same time, the proxies for the riskiness of the banking sector ($Z - Score$ and $Capital_{RWA}$) are not significant, as well as the proportion of non-traditional profits.
The second part of the table refers to the institutional factors. Here we can see that access to credit is negatively associated with the probability of receiving an investment but the magnitude of the marginal effects suggests that economic impact is almost irrelevant. Moreover, BVC investments are positively associated with stronger shareholder protection regulations. Lastly, the legal tradition seems to have no impact at all on the investment decision.

Lastly, Table 7 presents the estimated coefficients for the entrepreneurship factors. The $TaxScore$ is very weakly significant only in the third specification, while also the $EnforceCost$ is significant at the 5% level only in the third column. On the contrary, $EnforceTime$ is statistically significant across all the specifications and a standard deviation increase from the mean decreases the probability from 6.31% to 5.37%. At the same time, $StartingCost$ and $StartingProcedures$ are significant and with opposite signs, while $StartingTime$ is not relevant. It is worth noticing that most countries have very high scores for $StartingCost$ as the mean value is 98 and the maximum value is 100, still, a change from 98 to 100 leads to a raise in the probability of 1.77 percentage points. On the other hand, a standard deviation increase (12) from the mean value of $StartingProcedures$ (70) decreases the probability from 6.28% to 5.20%.

Table 6 — Banking and Institutional Factors

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	BVC_d (1)	BVC_d (2)	BVC_d (3)	Margins (1)	Margins (2)	Margins (3)
Traditional	-0.0001	-0.0001	-0.0004	-0.0000	-0.0000	-0.0001
	[-0.045]	[-0.059]	[-0.178]	[-0.045]	[-0.059]	[-0.178]
ROA	-0.0893***	-0.0890***	-0.0884**	-0.0124***	-0.0123***	-0.0121**
	[-2.596]	[-2.586]	[-2.346]	[-2.594]	[-2.584]	[-2.345]
Z-Score	0.0062	0.0062	0.0074	0.0009	0.0009	0.0010
	[1.216]	[1.215]	[1.404]	[1.216]	[1.214]	[1.403]
Capital$_{RWA}$	-0.0071	-0.0069	-0.0086	-0.0010	-0.0010	-0.0012
	[-0.632]	[-0.614]	[-0.747]	[-0.632]	[-0.614]	[-0.747]
Legal Rights	-0.0501**	-0.0509**	-0.0457**	-0.0069**	-0.0070**	-0.0063**
	[-2.402]	[-2.443]	[-2.063]	[-2.400]	[-2.441]	[-2.061]
Directors Liability	0.1092***	0.1081***	0.1038***	0.0151***	0.0150***	0.0142***
	[3.143]	[3.111]	[2.822]	[3.139]	[3.106]	[2.818]
Civil$_D$	0.0343	0.0320	-0.0620	0.0047	0.0044	-0.0085
	[0.159]	[0.148]	[-0.276]	[0.159]	[0.148]	[-0.276]
Constant	-7.4120***	-7.3800***	-8.4827***			
	[-3.620]	[-3.603]	[-3.769]			
Observations	17,518	17,514	16,043	17,518	17,514	16,043
Round FE	No	No	No	No	Yes	Yes
FF49 FE	No	No	No	No	No	Yes
Pseudo R^2	0.0907	0.0909	0.101			

*Estimated Standard Errors adjusted for heteroskedasticity (robust), t-stat in square brackets. *** p<0.01, ** p<0.05, * p<0.1*

Table 7 — Entrepreneurship Factors

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	BVC_d (1)	BVC_d (2)	BVC_d (3)	Margins (1)	Margins (2)	Margins (3)
VC Demand	-0.0061	-0.0062	-0.0028	-0.0008	-0.0009	-0.0004
	[-1.323]	[-1.348]	[-0.589]	[-1.323]	[-1.348]	[-0.589]
Tax Score	-0.0065	-0.0064	-0.0096*	-0.0009	-0.0009	-0.0013*
	[-1.310]	[-1.284]	[-1.827]	[-1.309]	[-1.283]	[-1.826]
Cost to Enforce	0.0071	0.0070	0.0108**	0.0010	0.0010	0.0015**
	[1.461]	[1.437]	[2.072]	[1.461]	[1.437]	[2.072]
Time to Enforce	-0.0062**	-0.0062**	-0.0077**	-0.0009**	-0.0009**	-0.0011**
	[-1.993]	[-1.982]	[-2.294]	[-1.993]	[-1.982]	[-2.294]
Starting Cost	0.0645***	0.0642***	0.0724***	0.0089***	0.0089***	0.0099***
	[2.596]	[2.584]	[2.720]	[2.595]	[2.582]	[2.719]
Starting Procedures	-0.0079***	-0.0079***	-0.0061**	-0.0011***	-0.0011***	-0.0008**
	[-2.721]	[-2.730]	[-2.011]	[-2.717]	[-2.727]	[-2.009]
Starting Time	-0.0039	-0.0039	-0.0049	-0.0005	-0.0005	-0.0007
	[-1.165]	[-1.160]	[-1.364]	[-1.165]	[-1.160]	[-1.364]
Insolvency Score	-0.0023	-0.0022	0.0005	-0.0003	-0.0003	0.0001
	[-0.655]	[-0.635]	[0.134]	[-0.655]	[-0.635]	[0.134]
Insolvency Years	-0.0975	-0.0972	-0.1096	-0.0135	-0.0134	-0.0150
	[-1.317]	[-1.310]	[-1.367]	[-1.317]	[-1.310]	[-1.367]
Constant	-7.4120***	-7.3800***	-8.4827***			
	[-3.620]	[-3.603]	[-3.769]			
Observations	17,518	17,514	16,043	17,518	17,514	16,043
Round FE	No	No	No	No	Yes	Yes
FF49 FE	No	No	No	No	No	Yes
Pseudo R^2	0.0907	0.0909	0.101			

*Estimated Standard Errors adjusted for heteroskedasticity (robust), t-stat in square brackets. *** $p<0.01$, ** $p<0.05$, * $p<0.1$*

Overall, it is hard to see a clear pattern of what the ”ideal” country for BVC looks like. In perspective, deal characteristics explain the vast majority of the decision to invest. Our results are still in line with some of the definitions in the literature: banks seem to be followers as they are more likely to take part in syndicates and invest in companies that have already received backing from other banks. At the same time, we document how bank-affiliated funds were more active in periods with negative interest rates, which are usually positively associated with VC funds' fundraising activity. On the other side, we do not find any connection between the number of VC funds and BVC activity, which rules out the hypothesis that banks appear to be more active because there are no other investors in that market. Additionally, the probability of receiving bank funding is not associated with most macroeconomic and market conditions, which is not consistent with the view that banks might have a key role in those areas less financially developed and with weaker economies.

4 BVC as Investors and the ”Anchoring” Role

This section of the paper focuses on bank-affiliated funds as venture capitalists. Firstly, we try to highlight what the presence of BVC in a syndicate means for the target company at the receiving end of the deal. As at this stage we do not have collected data on the outcome of the investments, we focus on the number of funds involved in the round and on the amount invested. Secondly, we test the ”anchoring” role documented by Condrea (2022) in our sample. The results would not be exactly comparable as we have excluded follow-on investments while clearing the dataset. Nevertheless, this feature is giving us a better idea of whether banks can attract new investors and additional funding in the following rounds. Thirdly, we analyse the long-run effect deriving from the presence of BVC in the pool of funds invested in a company.

In the second part of this section, we try to understand whether the effect attributed to bank-affiliated funds derives from them following other successful VC funds. For each year we identify the top 5% funds in terms of the number of past investments and we compare whether their presence in a syndicate can explain both the presence of BVC and the effect usually attributed to BVC.

4.1 Hypotheses

Referring to the claim that banks are strategic investors that tend to invest in proven businesses rather than screening early-stage companies that have not yet been certified by other investors, we expect to see BVCs associated with a larger number of investors in the current round.

H1. BVCs invest in larger syndicates than typical VCs.

Additionally, we assume that banks have a strong certification role in VC markets as they have access to private information through their lending channel. As such, we expect to confirm their ability to attract new investors in the following rounds.

H2. BVCs attract additional investors to their portfolio companies in the following rounds.

Banks are also considered deep-pocketed investors, as such we believe that their presence in a round has a positive impact on the amount invested.

H3. Banks are associated with larger financing rounds.

Consistent with the first hypothesis, we expect to see some kind of correlation between top VC funds' investment decisions and BVC's investments.

H4. Top VC funds investments can predict future BVC investments.

Lastly, we do not expect that the effect, if any, linked to the presence of banks-affiliated funds can be completely attributed to the presence of reputable VC funds.

H5. BVCs' effect on round characteristics is not completely explained by the presence of other VC funds in the syndicate.

4.2 Results

In Table 8 we report the results when analyzing the effect of BVC on the number of investors involved in a round. In the first four columns, the dependent variable is the number of investors in the round while the independent variables are either a dummy variable equal to 1 if a bank is involved in the round or two dummy variables indicating whether the round in which the bank is involved in the first round or one of the following rounds. Overall, the results indicate a round involving bank-affiliated funds is associated with an average of 0.43 additional investors compared to the other rounds. This correlation is stable when considering the first round separately from the others. The third and fourth columns replicate the specification used by Condrea (2022) where the independent variable is a dummy equal to 1 if at least a bank was involved in the round before but we fail to find any ability of banks to attract new additional investors in the following rounds. We introduce a dummy equal to 1 if only one BVC was involved in the round before and another dummy variable indicating whether more than one BVC was involved, but neither is statistically significant. In the last two columns, the dependent variable is the number of unique investors that backed a company up to the round considered. The results confirm the presence of a long-lasting effect of banks' presence on the number of investors backing a company.

Next, we move to consider the effect of banks on the amount invested in each round and the estimated coefficients are reported in Table 9. The two dependent variables of the first four columns are the natural logarithm of the amount invested and the natural logarithm of the same amount scaled by the number of unique investors involved in the round. The first two columns imply that rounds that include bank-affiliated funds are usually bigger. However the effect is smaller in magnitude if the round considered is not the first one, and it is not statistically significant when scaling the amount invested for the number of investors. The amount received by a company increases by 92% on average if a bank is involved in the first round, and this effect is lowered to 51% if we use the scaled measure. Therefore, the effect is strongly economically significant considering that the average amount raised in the first round is €5 million. When we move on to consider the "anchoring" view, we find that the involvement of a BVC in the rounds before is strongly connected with the amount raised in the following round and this effect is not affected when we scale the amount. Although the presence of one BVC in the rounds before is associated with a 28% increase in the amount invested, we find no evidence of this effect when more than one bank has backed the

Table 8 — Banks and the Number of Investors

	Current Round		Anchoring		Lasting Effect	
VARIABLES	Investors_R	Investors_R	Investors_R	Investors_R	Investors	Investors
BVC_R (1/0)	0.4332***					
	[8.686]					
$\text{BVC}_{R=1}$ (1/0)		0.4159***				
		[8.268]				
$\text{BVC}_{R>1}$ (1/0)		0.5393***				
		[8.619]				
BVC_{R-1} (1/0)			0.0329		0.7194***	
			[0.913]		[6.345]	
$\text{BVC}_{R-1} = 1$ (1/0)				0.0180		0.4186***
				[0.419]		[3.156]
$\text{BVC}_{R-1} > 1$ (1/0)				0.1509		2.3620***
				[1.138]		[3.761]
Constant	1.3055***	1.3055***	1.4576***	1.4574***	3.0586***	3.0748***
	[215.9]	[219.1]	[582.4]	[511.8]	[184.4]	[167.4]
Observations	23,778	23,778	2,962	2,962	2,962	2,962
Pre-round FE	Yes	Yes	Yes	Yes	Yes	Yes
FF49 FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
FirstYear FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.0585	0.0587	0.0156	0.0156	0.262	0.270

*Estimated Standard Errors clustered at country and industry level, t-stat in square brackets. *** $p<0.01$, ** $p<0.05$, * $p<0.1$*

Table 9 — Banks and the Amount Funded

	Current Round		Anchoring		Lasting Effect	
VARIABLES	Funding_R	$(\frac{Funding}{Investors})_R$	Funding_R	$(\frac{Funding}{Investors})_R$	Funding	$\frac{Funding}{Investors}$
$\text{BVC}_{R=1}$ (1/0)	0.6545***	0.4165**				
	[5.126]	[2.693]				
$\text{BVC}_{R>1}$ (1/0)	0.2326**	-0.0294				
	[2.060]	[-0.246]				
$\text{BVC}_{R-1}=1$ (1/0)			0.2538***	0.2564***	0.2794**	0.1930*
			[2.855]	[2.869]	[2.686]	[1.864]
$\text{BVC}_{R-1}>1$ (1/0)			0.3805	0.2686	0.3351	-0.1187
			[1.109]	[0.916]	[1.326]	[-0.542]
Constant	7.2823***	7.0454***	8.1590***	7.8436***	8.9465***	7.8560***
	[565.724]	[455.529]	[1,685.062]	[1,926.053]	[1,300.797]	[1,315.314]
Observations	14,583	14,583	2,105	2,105	1,569	1,569
R-squared	0.202	0.183	0.153	0.152	0.305	0.247
Pre-round FE	Yes	Yes	Yes	Yes	Yes	Yes
FF49 FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
FirstYear FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.197	0.178	0.121	0.120	0.272	0.211

*Estimated Standard Errors clustered at country and industry level, t-stat in square brackets. *** p<0.01, ** p<0.05, * p<0.1*

target company. Lastly, we consider as dependent variables the amount (scaled by the number of investors) received up to the round and we find comparable results when considering the long-run effect, but the statistical significance of the coefficients is weaker.

One of the main concerns when dealing with banks is how to reconcile the ”anchoring” role of BVC with the belief they are strategic investors that prefer to join good investments done by other VCs rather than screen the market for untested profitable opportunities. In this second part of the analysis, we include in the analysis a dummy variable representing the presence of a top VC fund. We identify the most reputable funds selecting for each year the top 5% funds in terms of investment conducted in the previous years.

In Table 10 we address the possibility that banks invest in the same companies backed by top VCs

and then we test whether the positive coefficients found in the previous section can be explained by the presence of other investors. The first two columns are a linear probability model where the dependent variable is the presence of a bank in the round, while the independent variables are two dummies indicating the presence of a top VC fund and a BVC in the previous round. The results indicate that there is not any connection between banks' investments and the investment decisions of the most reputable VC funds.
In the last three columns, we run the three specifications of the previous table with the addition of the top VC dummy. In column (3) we highlight how the presence of a reputable fund is positively associated with the number of investors involved in the round, while the coefficient associated with the BVC dummy is equal in magnitude to the one estimated before. Top VCs have a sort of negative "anchoring" effect, as the following rounds have on average 0.17 fewer investors.

In the last part of this section, we move to analyse how the presence of a top VC fund can affect the amount invested in the round. The six specifications used are the same as the ones in Table 9. The estimated coefficients are reported in Table 11 and they are never statistically significant. At the same time, the coefficients related to the presence of bank-affiliated funds are consistent with the ones estimated before.

Table 10 — Can Top VC "Anchor"?

	(1)	(2)	(3)	(4)	(5)
VARIABLES	BVC_R (1/0)	BVC_R (1/0)	$Investors_R$	$Investors_R$	Investors
BVC_{R-1} (1/0)		0.0848***		0.0276	0.7213***
		[4.873]		[0.806]	[6.475]
$TopVC_{R-1}$ (1/0)	0.0020	0.0072		-0.1685**	0.0606
	[0.082]	[0.290]		[-2.230]	[0.738]
BVC_R (1/0)			0.4370***		
			[8.885]		
$TopVC_{year-1}$ (1/0)			0.2038***		
			[3.581]		
Constant	0.1120***	0.1016***	1.2926***	1.4673***	3.0551***
	[862.138]	[428.238]	[166.628]	[513.804]	[242.399]
Observations	2,962	2,962	23,778	2,962	2,962
Pre-round FE	Yes	Yes	Yes	Yes	Yes
FF49 FE	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
FirstYear FE	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.0192	0.0258	0.0618	0.0170	0.262

Estimated Standard Errors clustered at country and industry level, t-stat in square brackets.

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 11 — Top VC and the Amount Invested

	Current Round		Anchoring		Lasting Effect	
VARIABLES	Funding$_R$	$(\frac{Funding}{Investors})_R$	Funding$_R$	$(\frac{Funding}{Investors})_R$	Funding	$\frac{Funding}{Investors}$
BVC$_R$ (1/0)	0.5840***	0.3405**				
	[4.594]	[2.281]				
TopVC$_{year-1}$ (1/0)	0.0437	-0.0977				
	[0.365]	[-0.916]				
BVC$_{R-1}$ (1/0)			0.2567**	0.2601**	0.2879**	0.1439
			[2.227]	[2.442]	[2.117]	[1.181]
TopVC$_{R-1}$ (1/0)			-0.2176	-0.1301	-0.1278	-0.1846
			[-0.995]	[-0.670]	[-0.896]	[-1.403]
Constant	7.2794***	7.0516***	8.1698***	7.8486***	8.9509***	7.8666***
	[907.247]	[528.870]	[1,845.327]	[2,155.595]	[1,027.154]	[1,118.791]
Observations	14,583	14,583	2,105	2,105	1,569	1,569
Pre-round FE	Yes	Yes	Yes	Yes	Yes	Yes
FF49 FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
FirstYear FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.196	0.177	0.121	0.121	0.272	0.211

*Estimated Standard Errors clustered at country and industry level, t-stat in square brackets. *** p<0.01, ** p<0.05, * p<0.1*

5 Conclusion

In this paper, we present the preliminary results of our analysis. We try to provide evidence of the importance of bank-affiliated funds in the VC markets and how their presence is affected by countries' economic and institutional characteristics. We refer to multiple factors commonly used to explain VC intensity to see whether banks have a more important role in countries where a market for independent VCs has not fully developed yet. We find weak and mixed evidence on supporting the idea that BVCs can be more active in an environment characterised by a higher risk due to weak legal protection and stronger asymmetric information issues. We will continue to work on the empirical strategy to arrive at a more conclusive answer.

We also expand the evidence on the "anchoring" role that BVCs might have, and while we do not find any evidence supporting the claim they can attract new investors in the following rounds, the evidence strongly supports the idea of banks as deep-pocketed investors. Companies that receive funding from BVC obtain a greater amount of VC financing not only in the round in which the bank is involved but also in the following ones.

Lastly, we consider the possibility that banks act as followers, matching the investment decisions of the most reputable VC funds. We find no evidence supporting this claim, the presence of a top VC fund does not predict BVCs investments and in most cases, it has no impact on the outcomes considered in the analysis.

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