

**Implementing fair value accounting in private
equity: An analysis of the challenges, scale of impact
and institutional consequences**

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Abstract

The fair value accounting framework (“FVAF”) emerged as a solution to improve performance reporting for private equity because the industry’s legacy accounting practice of holding investments at cost or last equity raise was concealing incidents of deterioration of value. Post-implementation of the FVAF, however, private equity investors face the conundrum whereby reported fair values for private equity investments prepared by fund managers (or “GPs”) tend to be stale, smoothed (possibly manipulated) and in need of contextual analysis. This has led investors to either build up in-house competency or engage third-party agents to support with administration issues such as inspecting fair values, producing “roll forward” values and ensuring that identical investments made via more than one GP are valued the same. Reliability concerns over the veracity of fair values has also (i) invited regulators to examine and take enforcement action against GPs who are discovered to be misrepresenting performance, (ii) intensified year-end audits, and (iii) encouraged third-party valuer engagements. These discoveries point to a phenomenon whereby the FVAF is more than just an accounting tool – it is an ‘institutional’ product that relies on the actions of various actors to make it ‘fit for use’. The research also finds that much like any other product, the cost of ‘manufacturing’ better quality fair values takes the form of monitoring costs as well as fees charged by auditors and third-party valuers, all of which are borne by the investor and/or the GP.

Interestingly, there is no common justification for the high institutional costs of producing fair values across various investor archetypes because of variation in uses: certain investors avoid using fair values to pay fees and price secondary transactions whilst others use these numbers to rebalance their exposures to certain asset classes in multi-asset portfolios. Investors also face the issue where an over-emphasis of using fair values to benchmark GP performance leads to counter-productivity because such encourages GPs to game their fundraising activities to coincide with demonstrable true and high fair values. Furthermore, the effectiveness of using fair values for grandstanding activities can have the unintended consequence of altering investment behaviour and encouraging short-termism because GPs may be inclined to make investments that deliver strong fair value gains in the short-term.

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I am also indebted to the many academics and practitioners that have helped enrich my understanding of the industry I work in – I have enjoyed reading your various papers. I am also immensely grateful to my managers for the learning opportunities. Thank you all.

Dedication

I dedicate this thesis to my family. To my dad, thank you for teaching me the importance of pursuing lifelong education and to my mom, for teaching me the importance of balance. To my husband, without whose support I would not find this balance. Finally, to Siobhan and Cameron, I have truly finished this thesis for the two of you – I hope you always appreciate that the pen is mightier than the sword.

1 Introduction

This chapter provides a high-level summary of this thesis. It begins with my background and motivations before highlighting some of the problematic issues that have manifested following private equity industry's adoption and implementation of the fair value accounting ("FVA") regime. It then proceeds to explain how a novel contribution can be made to the body of knowledge that sits at the intersection of FVA and private equity by (i) describing the rise of FVA in the private equity industry, (ii) analysing the scale of impact following the adoption and implementation of FVA and finally, (iii) analysing the transformative effects of FVA.

This chapter concludes by describing the focal points of the research, scope of research, and an overview of the structure of the thesis.

1.1 Motivations of the researcher

I am a finance professional with approximately fourteen years of work experience in the private equity industry. At the time I commenced this research, I had spent over four years working as a product manager at a listed private equity firm that operated predominantly in the private equity fund-of-funds space. My role was that of a product manager of private equity secondary funds, which had raised billions of dollars from institutional investors, pension funds and endowments. Such secondary funds provided liquidity to private equity investors by acquiring the latter's limited partnership interest and assuming their unfunded liabilities stemming from a capital commitment to the private equity fund. My stint at this company was unique because my then-employer undertook the role of an investor in private equity funds, as well as a fund manager, therefore, being held responsible and accountable for the management of third-party capital. As part of my job scope, I was required to report on deal flows, new investments, valuation movements, as well as significant cash flow activity. I subsequently took on the role of an investment professional in various real estate, growth, and venture capital firms, where part of my job scope included interfacing with external valuation agents and preparing valuations internally. At the time of completing this thesis, I perform the duties of an executive director of a private equity fund management company, and I oversee the preparation of valuations by the firm and by external valuers as part of my roster of responsibilities.

The timing of my career has been key in cultivating my interest in FVA, particularly in the context of private equity. I joined the private equity industry not long after the collapse of Lehman Brothers in mid-September 2008. I noticed the lack of importance that private equity firms gave to fair value estimates at the time and witnessed first-hand how reluctant private equity firms were at incurring paper losses during the Global Financial Crisis of 2008 (“GFC”), to the growing receptiveness and importance of FVA over time. Over the past few years, I have also noticed the growing authority of both valuation agents and auditors, in determining fair valuation estimates vis-à-vis the private equity firms, for financial reporting purposes. Within the companies that I have worked for, I have found it fascinating that it is the analysts or independent valuers who prepare fair value estimates, leaving accountants with a coordinating role of collecting FVA information from the analysts and independent valuers and entering such information into the ledger. I have also faced personal challenges when preparing and defending fair value estimates of portfolio companies under my care, primarily because these investments are illiquid and presenting auditable data is challenging. As a result, I sought to understand the rise and endurance of what I believed to be a challenging accounting framework for the private equity industry.

As a first step, I researched the need for ‘performance data’ for private equity and carried out various archival studies to produce a narrative on the reasons why FVA was sought as a solution to performance measurement for private equity. In step two, I identified the tension points that manifested post the implementation of FVA and the controls that were put in place to make FVA ‘work’ for the industry. Finally, I mapped the institutional forces that were involved in ensuring that fair values were ‘fit for use’.

Armed with these findings, I was then able to apply an interpretivist lens and, inter alia, make an assessment as to the importance of institutional and accredited investors in supporting the use of this “institutional product”. I also investigated the potential for constituency effects because of the high fees relating to audits and valuation exercises and reviewed how these costs placed certain private equity funds at a relative disadvantage versus others. I further developed this analysis by making recommendations for improvements in regulatory infrastructure targeting the private equity industry. The following chapter provides a preface of my study.

1.2 The rise of fair value measurements

The catalyst for the introduction of US GAAP's Accounting Standard Code Topic 820 ("ASC Topic 820"), or Fair Value Measurements, dates to the turn of the century shortly after the collapse of Enron. In May 2002, the Chief Accountant of the US Securities and Exchange Commission ("SEC"), Robert K. Herdman, mentioned that events at the time, most notably the implosion of Enron, the indictment of Arthur Andersen and the bankruptcy of Global Crossing, had raised pertinent questions on the transparency, accounting, and disclosure practices of certain companies (Herdman, 2002). Although the Financial Accounting Standards Board ("FASB") is a private standard-setting body whose primary purpose is to establish and improve US GAAP, Herdman (2002) explained that the SEC was ultimately responsible for ensuring that the FASB dealt with issues referred to it.

To provide some context, the reason why the SEC was so entangled in what the FASB was doing at the time was because public and regulated companies were preparing their accounts in accordance with US GAAP i.e., vulnerabilities in the US GAAP meant that the SEC was not exercising its duties in protecting investors (Herdman, 2002). Herdman (2002) also explained that the cooperative effort between the public and private sectors was the reason why US had best financial reporting system in the world, and that the SEC was intent on making it even better.

In tackling the issue of fair value measurements, the SEC strongly backed a principle-based standard as opposed to a rule-based one because it noticed how rule-based accounting encouraged "check-the-box" mentality and provided opportunities to financially engineer around the rules. In his speech before the House Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises, Committee on Financial Services, Herdman (2002) explained:

"A move to principle-based standards will require greater discipline by the corporate community, the accounting profession, private-sector standard-setting bodies, and the SEC staff. A move away from a check-the-box approach to financial reporting means that all constituencies must make concerted efforts to report transactions consistent with the objectives of the standards. While this may mean that not all transactions are recorded in exactly the same manner, it is my belief that similar transactions in this

system of principle-based standards will not be reported in materially different ways, preserving comparability. Finally, a critical and important benefit of principles-based standards is that it would mitigate the opportunities to financially engineer around the rules. We have been working with the FASB to change its style to be more principle-based.”

The FASB was also under pressure by other regulators such as the Federal Reserve Bank (the “Fed”), to resolve concerns that the banks were misstating fair valuations. Although FVA was advocated for financial institutions because it was deemed to be more useful and relevant vis-à-vis historical cost accounting, it came at the price of being less reliable (Barth, 2007). The Fed, which regulates private banks in the United States of America, also recommended that the FASB work closely with the SEC, the Public Company Accounting Oversight Board (“PCAOB”), the American Institute of Certified Public Accountants (“AICPA”), the Institute of Internal Auditors (“IIA”) and accounting firms, to improve the verifiability and auditability of fair value estimates (Bies, 2004).

In response to these combined pressures, the FASB released SFAS 157, a fair value measurement standard that is now referred to as ASC Topic 820 (FASB, 2011). ASC Topic 820 provides a single definition, framework, and disclosure requirements for fair value measurements (FASB, 2011). The International Accounting Standard Board (“IASB”), a fellow global standard setter responsible for developing the International Financial Reporting Standards (“IFRS”), harmonised the use of fair value measurements by releasing IFRS 13, which essentially is the equivalent of ASC Topic 820 (PwC.com, 2019b). The requirement to use FVA, together with the use of the fair value measurement standards (hereon referred to as the Fair Value Accounting Framework or the “FVAF”), has far-reaching implications because US GAAP and IFRS are typically heralded as the world’s leading accounting standards (IASPlus, 2022).

To this end, the FASB defines fair value as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date” (FASB, 2011). One of the key features of the FASB’s FVAF, is that it introduces the concept of a 'fair value hierarchy' (FASB, 2011). The hierarchy categorizes the inputs used in valuation techniques into three levels. The hierarchy assigns the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 inputs),

lower priorities to unquoted inputs (level 2) and unobservable inputs (level 3), in descending order of priority (FASB, 2011). IFRS 13 uses different words to express the same requirements.

1.3 Private equity's fair valuation conundrum

The financial institutions subjected to FVA are not monolithic (Okamoto 2014), resulting in unique settings in which the application of the FVAF can be studied. However, there is arguably one industry that is presented with a peculiar set of challenges in implementing FVA: the private equity industry (also referred to as “PE” hereon). The private equity industry is a fast-growing alternative investment class. At the time of writing, the industry has circa US\$7.4 trillion in assets under management (Wigglesworth, 2021) and is represented by a diverse group of private equity firms investing in areas such as leveraged buyouts, venture capital, infrastructure, private credit, real estate, and natural resources (Leleux, Swaay & Megally, 2015).

The PE industry operates on the manifesto, in that it is possible to create optimal conditions to achieve outsized returns on privately held investments. Such conditions are created by placing risk capital in the hands of professional fund managers (also known as the general partners or “GPs”) and using high-powered incentive structures to shape calculated risk-taking behaviour i.e., investors often agree to the payment of carried interest such as 20 to 30 percent of any distributions in excess of an investor's total capital contributions, so long as the fund's cumulative distributions to investors are no lower than a benchmark internal rate of return (“IRR”).

The introduction of ASC Topic 820 and IFRS 13 is relevant to private equity funds because many qualify as investment companies and are, therefore, statutorily required/permitted (IFRS, 2022; Easton, Larocque and Stevens, 2019) or contractually under an obligation to use US GAAP and IFRS – the two leading global accounting standards – to prepare their financial statements (Easton, Larocque and Stevens, 2019).

There is, however, the overarching issue that the unique characteristics of private equity makes the use of the FVAF challenging and these tension points undermine the relevance and decision-usefulness of such fair value accounting information. To expound on some of these

matters, consider the structure of the traditional private equity fund i.e., a closed-ended limited partnership with a charter life of ten years. Investors (also known as “limited partners” or “LPs” hereon) will subscribe to blind pool funds and cannot voluntarily redeem their limited partnership interests after their initial subscription. Such private equity structure accommodates the GPs need to ensure that s/he has full visibility over the cash that can be deployed and is not under any pressure to monetize investments prematurely. Having visibility over the aggregate cash-on-hand and not having to honour any redemption requests accommodates the GPs strategy of assembling a single portfolio of private equities over several years (also known as the investment period), pursuing value creation activities, and exiting these investments when conditions are deemed to be optimal. In short, subscribing to a blind pool fund and not having rights to voluntary redemptions means that fair valuations for private equity is not used to price subscriptions or redemptions because private equity funds are not unitized i.e., private equity investors have sharing percentages calculated based on the weight of their capital commitments relative to the total capital commitments to the private equity fund and do not hold any units. This means that the use of FVA in the private equity industry differs from conventions of how such information is used in the mutual fund and hedge fund industry where, for instance, funds may be open-ended and fair values are used to price units for purchase or redemption. The nature of fair valuations for private equity also does not create a strong argument that such information can be used to compare performance across private equity firms because valuation techniques differ from manager to manager. Spiegel and McCavitt (2009) explain how certain investments can be valued very differently across private equity firms as one private equity firm may consider a public comparable in valuing while another fund sponsor determines no comparable exists. They explain the consequence of such as follows: *“For an institutional investor holding the same investment through different fund sponsors, this means it could have multiple valuations for the same investment in its portfolio”*.

There are also administrative challenges when preparing fair value reports for private equity funds. The FVAF, coupled with market standards on frequency on reporting, means that private equity firms need to (a) collect qualitative and quantitative information from portfolio companies (b) run fair valuation models (c) aggregate this information with other movements in the fund and finally, (d) send quarterly reports outlining fair values and aggregate NAVs to investors between 45 to 60 days, after the measurement date (Kemmerer and Weidig, 2015).

Another reason why private equity makes for an intriguing arena to study the use of FVA is because valuing privately-held investments where no ready market exists requires a significant amount of preparer discretion. Complying with the FVAF requires that the GP represent the market ontology of fair value as defined by the standards i.e., the exit price as on the measurement date, and not the seller perspective of fair value (Barker and Schulte, 2017). Therefore, the FVAF requires that GPs simulate the exit price of an investment on the reporting date, even though (i) no real buyer exists and (ii) the GP has no intention of selling the investment on or around the reporting date.

A related issue is that fair values can be biased. Although exercising professional judgement is part and parcel of a GP's responsibilities, particularly when an investor has entrusted a private equity firm with investing and managing private equity investments, the presence of pre-existing biases that a GP might harbour, adds a layer of complexity to the valuation process; it may have an influence on the evaluation of a private equity asset. These biases are tendencies or patterns that are thought to conflict with prescriptions based on both rationality and empiricism (Chambers et al., 2012). While it is postulated that there is scope for bias in any type of valuation, it can be argued that the direction and magnitude of this bias is directly proportional to how much the valuer is rewarded (Damodaran, 2019). Therefore, one could argue that certain conditions could motivate GPs to exaggerate fair valuations e.g., to improve its interim track record for short-term goals such as a successful fundraising exercise. It is important to consider that private equity's reputation concerning sharp practices such as cash stripping, accounting manipulation and window-dressing (Ross & Hopkins, 2011) intensifies concerns over possible GP misconduct over performance calculation and presentation.

Although close regulatory oversight could solve for some of these concerns, many private equity firms such as in the US, for example, operate under "regulatory-lite" conditions by availing certain regulatory exemptions such as by raising capital exclusively from a limited number of accredited investors (Morgan Lewis, 2015). The merit to such regulatory frameworks is that private equity can operate with some flexibility away from the public eye, which is important as a key offering of private equity is to manoeuvre in ways listed companies simply cannot. However, the regulatory framework is arguably a double-edged sword because it could provide a cover for fund managers to engage in surreptitious activities. Certain strands of research show how GPs inflate fund performance when information asymmetries are high

as well as when accounting and legal environments are less restrictive (Cumming and Walz, 2010).

1.4 Objective of the research

The peculiar case of rolling out the FVAF for private equity has led to a number of quantitative studies that attempt to measure, using statistics of otherwise, if GPs tend to be conservative or exaggerate fair values. Examples of these studies include those by Jenkinson, Sousa and Stucke (2013), Barber and Yasuda (2017) and Huether (2018). Jenkinson, Sousa and Stucke (2013) concluded that fund valuations are smooth relative to movements in public markets, which some observers attribute to reasons such as GPs appraising private equity assets less frequently (CalPERS, 2019) and also to a general reluctance by GPs to introduce volatility into fair value estimates (Garcia, 2019). Barber and Yasuda (2017) found that fund managers inflate fair values, particularly around fundraising exercises and where the cost of manipulation is low i.e., younger funds that have not yet built up a positive reputation are more likely to inflate numbers during fundraising periods. Huether (2018) found that GPs time their fundraisings so they coincide with true high-performance estimates of successful deals.

Investors have also been outspoken with the problems that have manifested with the application of the FVAF for private equity. These investors include Ben Meng, the erstwhile Chief Investment Officer (“CIO”) of the California Public Employees’ Retirement System (“CalPERS”), who expressed to the pension fund’s Investment Committee how stale, model-based and possibly smoothed fair value estimates in private equity can have effect on the asset class’s risk measurements. He says,

“In private markets, since it’s private and not traded on an exchange, so they are marked, they [private investments] are reporting less frequently, the valuation is really based on a model valuation and not really a market transaction, and many times the valuation is delayed, so not timely valuation. So when it’s not a timely valuation it provides a time diversification as well, so the risk reduction from private markets really coming from two folds: one is alpha components that it’s diversifiable, the idiosyncratic risk, and the other one is beta, the valuation, the marking is less frequent

and is marked based on the model, appraisal based, not so much about market transaction based.”(CalPERS, 2019)

Another example of the ramifications of private equity’s stale fair value data dates back to the GFC. At the material time, many pension funds found themselves overallocated to private equity because of what is commonly referred to as the “denominator effect” (Akers and Nicum, 2019). The denominator effect is a phenomenon whereby drops in the valuations of listed securities, reduce the overall value of a portfolio’s overall asset, which results in an overexposure to asset classes such as private equity that have either (i) performed better at the measurement date or (ii) in the context of a correction in the capital markets for tradeable assets, have valuations that have not been updated in a timely manner (Hegi and Nutti, 2011). The denominator effect has economic consequences for pension funds with strict asset allocation guidelines, as it places these investment portfolios under a technical breach (Akers and Nicum, 2019). Many US pension funds were offloading their private equity positions in the secondary market in an environment of heavy discounting during the GFC (Bloomberg News, 2011; The Preqin Private Equity Secondaries Review, 2010) as a response to correcting the technical breach in asset allocations.

The foregoing paints a negative picture on the use of the FVAF for private equity, which makes private equity’s move away from its legacy valuation practices of holding investments at cost (Fenn, Liang, and Prowse, 1995; Larsen and Nebb, 2013) questionable and intriguing. There is a large gap that needs to be bridged in our understanding of the FVAF for private equity i.e., how, and why a challenging and problematic accounting architecture is embraced by the private equity industry. To this end, this research sets out to (i) identify the reasons behind the rise of fair valuation concepts for private equity (ii) examine the scale of impact of the FVAF following its implementation and finally, (iii) question the scale of use of the FVAF for the modern-day investor and (iv) investigate the transformative effects of the FVAF on the private equity industry. By answering these research questions, this thesis presents a new vantage point on how to view FVAF for private equity.

1.5 Focal points of investigation

In the following chapters, the research will navigate through the contemporaneous events that led to the rise of the FVAF for the private equity industry in the early 2000s. For instance, the research examines how the 2000 stock market crash attributable to the collapse of the technology start-ups (the “DotCom bust”) put private equity’s performance in the spotlight (Creswell, 2003). It examines how private equity’s legacy valuation practice of holding investments at cost was possibly overstating the holding value of poor performing investments (CCBJ, 2007). It also probes how the prominence of private equity together with the significant amount of capital raised from US pension funds and endowments led to demands for more transparency as well as the advancement of the use of FVA concepts. It then goes on to describe the tension points of implementing FVA for private equity and the controls that have been introduced to validate these numbers.

In relation to the foregoing, the research navigates trade and academic literature to identify the institutional actors that have architected and responded to introduce controls to overcome the challenges of implementing the FVAF for private equity. It also reviews institutional dynamics that create demand for certain types of actors. For example, the research looks at how risks of fair value misstatements have led to increased regulatory oversight over the private equity industry pertaining to this subject. This in turn has an impact on the way private equity firms operate: in the US, the SEC’s continued scrutiny of private equity valuations is forcing many private equity funds out of their practice of producing independent valuations internally to looking for third-party valuation firms to perform this function instead (Kim and Knauth, 2020).

The research also investigates concerns that GPs/investors are incurring exorbitant sums because of the fees related to preparing and validating fair values (Border, 2010; Private Funds CFO, 2014; NVCA, 2015). The research also examines the manifestation of constituency effects in favour of paid-for services by third-party valuers by examining, for example, the composition of the IPEV Board, which is responsible for setting best practice standards for the private equity industry. The standards issued by the IPEV Board can influence GPs to engage paid-for services of experts that can prepare IPEV-compliant fair values when this expertise is not available in-house. Similarly, it also examines the composition of the Financial Instruments

Board of the International Valuation Standards Council (“IVSC”), which is also responsible for setting valuation standards. It relates the findings of this analysis with the advancement of more and more technical models, which can also manifest more demand for professional valuers that are able to prepare fair values compliant with the IVSC standards.

Finally, the research explores how a high burden is placed on investors because of the administration complexity of managing fair values as well as the constant watchfulness demanded in monitoring risk manifesting from fair valuations. To this end, it explains how the ringfencing of private equity to institutional and accredited investors underpin the stability of the FVAF because such investors have access to resources that can help to manage their private equity positions and also demonstrate qualities of being competent risk managers.

Through the study and the adopted method, the research moves onto interrogate the importance of the institutional background that supports the use of the FVAF and how features of the institutional background warrant regulatory attention. The following paragraphs describe these themes in summary terms:

Stabilizing the use of fair valuations

Investors can draw inferences about GP skill from fair values as the accounting regime provides investors with an estimate of the economic value of the GP’s investment portfolio over its holding period in the absence of an actual transaction. Fair valuations for private equity, therefore, allow for the “*constituting and realizing economic conceptions of entities and the performance of organizational agents*” (Mennicken and Power, 2015).

The fact that an imperfect accounting data can be used as a proxy to measure GP skill can be deemed as innovative, however, it is also important to establish the FVAF as an “institutional product” that is stabilized through the actions of various actors acting-in-concert. In this regard, it is important to dispel the myth that simply auditing or engaging third party valuers leads to precision reporting for private equity because nothing in the work scope of such constituents extinguishes estimation uncertainty from the preparation of fair values in the absence of observable data points. There is also a separate issue of third-party valuers using the label of “independence” to promote their services. One can draw parallels between the relationship of an LP-GP in a paid engagement to the conflicts of interest that employees of private equity

firms face when fair valuations are organized and prepared in-house. To expound, third-party valuers generate significant revenue from the private equity industry, which can be argued to erode “independence” as these agents seek to maintain positive relationships with the GP to ensure recurring engagements. This exact point is raised by Gwilliam and Jackson (2008) in a post-review of the Enron scandal, wherein they explain that valuation exercises that were undertaken by third parties for significant fees and the numbers they prepared were frequently highly optimistic and not necessarily independent. Therefore, there is a need for regulators to broaden their gaze to include the governance of independent valuers as misconduct from these actors could also be a further source of ‘destabilization’ for the use of the FVAF.

Variation in uses

The GFC manifested concerns that fair value accounting was contributing to procyclicality because preparers were marking certain assets to “fire sale” prices (Botosan, Carrizosa and Huffman, 2011). Although this was a key theme of discussion in many accounting forums, the narrative was different for private equity because GPs were not writing down NAVs fast enough (Davies, 2009), which interestingly would have contributed to counter-cyclicality instead! In multi-asset portfolios, these polarized approaches to preparing fair values have the potency to create significant pronouncements of exposure to private equity versus other asset classes. This phenomenon is potentially what led to several US pension funds offloading their private equity positions in the secondary market because these investors found themselves over-exposed to private equity (Bloomberg News, 2011; The Preqin Private Equity Secondaries Review, 2010).

A juxtaposition of the events above with recommendations in a publication by the Bank for International Settlements (“BIS”) (2009) suggest inconsistency in investor approaches to managing fair value uncertainty. For instance, in the BIS publication, the authors advise that “*insufficient market depth or reliance on valuation models using unobservable inputs that are difficult to verify may create considerable valuation uncertainty for certain instruments*” (Bank for International Settlements, 2009). The authors suggest that one could partially de-link the valuation process from certain aspects of income and profit recognition when significant uncertainty exists. This would be the purpose of the valuation reserve or adjustment which would act as a “filter” (e.g., reducing the possibility that initial valuation overstatements might flow into income). The authors also recommend that the size of the reserve or adjustment could

be based on the degree of uncertainty created by the weakness in the data or underlying modelling approach (Bank for International Settlements, 2009).

The above-mentioned examples show an “over-investment” in fair values in one group of investors whilst the other recommends peripheralizing such numbers on the account that certain environmental factors maybe influencing the reliability of data. Such variation in uses has regulatory implications because certain adverse economic impacts felt by investors have less to do with the valuation device and more to do with mishandling or misperceptions of the accuracy of the valuation device.

Performativity

There exists a phenomenon where a valuation device has the ability to influence the reality it is meant to describe, instead of merely describing it. Faulconbridge and Muzio (2021) explain such a phenomenon to be attributable to the influence a valuation device possesses when it is over-emphasized and how this can shape the object of value. In the context of valuation devices aimed at measuring GP skill, the championing of FVAF as a benchmarking tool can condition “short-termism” and alter investment behaviours. For example, certain investment consultants calculate a GP’s total returns using a combination of realized and unrealized data and can “rank” manager performance through this analysis. Assuming these rankings lead to positive fundraising outcomes, certain venture capitalists maybe conditioned to invest in companies that can support high rankings in such “leader boards”.

Opaqueness and arbitrage opportunities

Many news articles still label the private equity industry as being opaque. It is possible that private equity’s reputation for ‘opaqueness’ is attributable to financial reporting not being accessible to the public. Adding oil to the fire is that performance on private equity is idiosyncratic and not straightforwardly conveyed by the FVAF, thus, contributing to the perception of opaqueness. Take for example the regulatory warning that says, “past performance is not indicative of future results” added to a track record slide. It adds little to the evaluation of a private equity investment and potentially misleading because some research has shown that performance is sticky in private equity funds, although persistence weakens over time, and such is what contrasts private equity performance from that of mutual funds or hedge funds where there is no persistence in manager performance! (Lerner, 2022). Such

beckons the question, “How can policymakers help investors with their private equity programmes and overcome perceptions of transparency?”

Heterogeneity in private equity

One of the dominant regulatory strategies to curtail fair valuation misstatement risks is the requirement that these numbers are to be independently prepared. However, introducing a "one-size-fits-all" regulation of requiring all GPs to prepare independent fair valuations will likely penalize small fund managers that are not able to organize independent valuations internally. These GPs will have to turn to third-party firms to provide such services adding to their existing costs of bureaucracy. This comparative disadvantage is ironic considering that FVA was championed to level the playing across capital market players (Wallison, 2009).

In recognition of this phenomenon, certain regulators have been deliberate about “re-levelling” the playing field. Such include Singapore’s financial services regulator, the Monetary Authority of Singapore (“MAS”). The regulator has removed independent valuation requirements for venture capital fund manager license holders but has maintained the requirement that they only raise capital from accredited and institutional investors.

Whilst the MAS has been deliberate about “re-levelling” the playing field to address the comparative disadvantages of certain sub-categorises of private equity players, there could be other strategies such as offering subsidies, or perhaps introducing other forms of bespoke valuation devices for the venture capital industry that do not come attached with such a high price tag. For example, regulators could even do away with fair valuation accounting for very small managers and/or venture capital fund managers based on a small economic imprint and limited uses in the hands of the financial statement user.

The rise of neo-private equity finance and risk management functions

It can be argued that fair value accounting has introduced an inordinate level of complexity to private equity administration. The valuation framework demands that the investor possess a wider skill set including the ability to manage complex data, understand valuation techniques for private markets as well as adopt unconventional risk management techniques to account for estimation uncertainty.

In this regard, the sentiments of former General Counsel of the SEC Brian Cartwright that amateur retail investors are at a disadvantage to professionals (Cartwright, 2007) continue to be valid today. Regulators need to continue to exercise vigilance and discernment especially in the context of private equity players capitalizing on a misleading narratives of simplified monitoring made possible for private equity when in fact the FVAF is a pliable tool that relies on the actions and reactions of various actors to make it fit for use. Changing components of the institutional background alters the effectiveness of the product.

1.6 Scope of research

The United States (the “US”)

The research presented in this thesis focuses on the US because the FASB was the first mover in the implementation of the FVAF. To expound, the main discourse behind the introduction of fair value measurements can be traced back to the SEC pushing for the tightening of fair valuation guidelines having observed the patterns between fair valuation practices and incidents of securities fraud (Herdman, 2002). The fall of Enron made the regulators aware of how organizations were “engineering around the rules” (Herdman, 2002) and led the SEC to request that the FASB expeditiously discuss and implement fair value measurements for financial instruments.

The American hegemony in the 1990s leading up to the 2000s had also cast aspirations amongst many nations to do business with the US. Consequently, harmonizing accounting standards was a big part of that plan. Such aspirations were noted in a speech at the European Institute in Washington by Guenter Burghardt, the European Union Ambassador to the US, who spoke about plans to create a transatlantic securities market (Burghardt, 2003). He also spoke about how Europe supported a market in which investors on both sides of the Atlantic have access to adequate and timely information based on one set of principles-based global accounting rules (Burghardt, 2003). The G20 also supported the harmonization of accounting standards (MOF, 2022; Burghardt, 2003; Deloitte, 2012) in the hopes that it would create a larger and integrated capital market. In particular, the G20 backed the harmonisation of FVA because it allowed investors to compare the results of companies that are competing for capital, the idea being that if comparability was possible, capital was allocated more efficiently (Wallison, 2009). As Palea (2015) pointed out, harmonizing IFRS 13 with ASC Topic 820 led to the US discourse

pervading the standard setting agenda. It is for these reasons this research is pivoted to the US and the story behind the evolution and introduction of the FVAF led by the FASB.

The following research also focuses on US private equity firms because these organizations were the first to adopt the FASB's FVAF and because the US was aggressive in the regulation of the audit and accounting profession because of the Sarbanes-Oxley Act of 2002 (also known as SOX hereon). By centering the research on private equity funds operating in the US, this research analyses how the regulation of the auditing profession by the PCAOB, which was established by the US Congress, led to the tightening of audit processes of private equity funds. This research also investigates how the Dodd-Frank Wall Street Reform and Consumer Protection Act (also known as "Dodd-Frank Act" hereon), targets private equity and how this had an impact on the regulation of financial reporting matters.

Notwithstanding the foregoing, this thesis also makes a few references to private equity firms in Europe and the rest of the world because of the subsequent harmonization of international accounting frameworks and the many similarities in the way private equity firms are regulated and respond to such regulation around the world.

1.7 Structure of thesis

The structure of the thesis is as follows:

Chapter 2: Chapter 2 is divided into three sections. Section A describes the characteristics and nuances of private equity investing and then goes onto explain the chief risks that investors are exposed to. Section B explores the tools that investors use to select and manage their private equity exposures and investigates the differences between primary and secondary private equity investors. Finally, Section C analyses the findings in Section A and Section B to develop and argument of why, how, and when FVA has the potential to be useful to primary and secondary investors, respectively.

Chapter 3: Chapter 3 is divided into three sections. Section A broadly narrates the rise of FVA concepts in the US. Section B looks specifically at how FVA gained relevance in the private equity industry and examines the challenges and transformation that occurred following the implementation of the FVA. Finally, Section C presents a map of the institutional background

in which fair values are produced and presents the argument of why the FVAF is more than just an accounting tool. It explains the FVAF is more of an ‘institutional’ product because of the various actors, namely, the investors, regulators, standard setters, auditors, and third-party valuation agents, that need to act-in-concert to support and validate its use.

Chapter 4: Chapter 4 further develops the narrative presented in Chapter 3. It explains the type of role the private equity investor takes in the stabilization of the use of fair values and why such numbers continue to be relevant to such investors. It also argues how certain trends suggest that monetary incentives may create constituent effects in favour of the extant framework to prepare and process fair values. It argues this point by explaining how promoting the use of more and more technical valuation models for fair valuation exercises may be indicative of a constituency effect because it persuades the GP to look for third-party valuation agents to support with such tasks.

Chapter 5: This chapter summarizes the key findings of the thesis. It also discusses other pertinent themes important to improve regulatory strategy and stimulate further academic study into the institutional consequences of accounting regulations. These includes discussions around the use of imperfect data to measure GP skill, the scale and variation of uses of the FVAF, the transformative effects of FVAF on governance, cost, and organizational structures, as well as to what extent an overemphasis of the FVAF can induce behavioural changes in the private equity industry.

2 Private Equity

The challenges the private equity industry faces with the implementation of FVA is unique. As a first step in the study of FVA and private equity, it is important to understand the value of FVA as an information tool for private equity investors i.e., why, how and when investors can use such a tool? For example, can FVA be used to price limited partnership interests? Is this useful in the context of closed-ended funds with restrictions on voluntary redemptions? Is it useful as a due diligence tool to evaluate GP skill? In order to answer these questions, Section A sets out to identify the unique features of private equity such as its risk/return profile, fund structure and material risks. Section B proceeds to describe the profile of private equity investors (primary/secondary) and the tools they used to manage private equity. Finally, Section C presents an argument of the circumstances under which FVA can be relevant and useful for primary and secondary private equity investors, respectively.

Section A

2.1 Introduction to private equity

In finance, equity has come to mean “awarding of equal protection to equal interests”, taking its definition from a combination of Aristotelean and Roman roots (Tella, 2008). To take equity in a company is, therefore, to have interests in the economics of a company, in proportion to the number of shares held in the entity. Private equity has a binomial nomenclature in reference to shares held in privately-held companies – in this way it differentiates itself from listed equities, which refers to shares registered and traded on a public stock exchange and available to all investors.

The business use of the term private equity, however, goes beyond the description of an investment in a privately held company. Private equity is an alternative asset class (Leleux, Swaay & Megally, 2015), which is professionally managed (Fenn, Liang, and Prowse, 1995). Private equity also has different meanings, on either side of the Atlantic. In Europe, the definition of private equity is an asset class comprising buyout and venture capital firms, however, in the US, private equity is a term used exclusively for the buyout industry, whereas investments in young start-ups, are referred to as “venture capital” (Fraser-Sampson (page 6), 2010).

This thesis, however, borrows the definition of private equity from Leleux, Swaay & Megally (2015), who define private equity as a professionally managed asset class investing in companies not quoted on a stock exchange. By defining private equity in this manner, this thesis covers the breadth of strategies that occupy the private markets space.

The liberalisation of the US economy created conditions that sparked America's private equity industry. Prior to this period, many companies in the US operated under the managerial business model, in which the ownership of a company was decoupled from the managerial control of a company (Appelbaum and Batt, 2014). This model led to more empire-building vis-à-vis maximizing shareholder value (Appelbaum and Batt, 2014). However, through several strategic policy changes championed by Ronald Reagan, the US economy liberalized and financialized (Niblett, 2016).

Among these policy changes was the ability to consummate take-overs without the consent of CEOs and board of directors (Jarrell, 1983). In this way, shareholders were empowered by being able to seek financial gain through the sale of their shareholdings to the acquirer. This paved way for private equity to pursue buyout activities. For the sake of comparison, major providers of business capital in Germany and Japan in the early 2000s were not holding securities for sale (Drucker, 1991). The major banks in Germany and top ten industry groups in Japan, also known as the keiretsu, were less interested in dividends as opposed to creating business opportunities with the companies they invested in (Drucker, 1991). In Japan the keiretsu's chief agenda was amassing influence and power (Drucker, 1991).

Today, the private equity industry is a prominent and fast-growing alternative investment class. According to Morgan Stanley, the industry managed US\$7.4 trillion in assets towards the end of 2020 and projected that this figure was going to reach US\$13 trillion by 2025 (Wigglesworth, 2021). The industry's growth is driven largely by investments from institutional investors such as insurance companies, pension funds and sovereign wealth funds (SWFs) (Leleux, Swaay & Megally, 2015).

Private equity firms are not a homogenous group. They invest in a wide range of investments such as leveraged buyouts, venture capital, infrastructure, private credit, real estate, and natural

resources (Leleux, Swaay & Megally, 2015). The private equity business is also not confined to any borders: private equity funds raise and deploy capital domestically, regionally, or internationally. Globalisation has supported many firms with the tools to raise and deploy capital transnationally, although the domicile of the GP and the private equity fund has an implication on the governance framework surrounding the operations of the GP and the fund respectively. At the time of writing, the largest players in the professionally managed private equity market are Blackstone, CVC Capital Partners, Carlyle Group and KKR & Co. (Bezek and Divine, 2022).

The attractiveness of investing in private equity lies in its potential for high return. Harris, Jenkinson, and Kaplan (2012) studied the performance of nearly 1400 US private equity funds sourced from over 200 institutional investors and discovered that the average US buyout fund performance exceeded that of public markets in the 1980s, 1990s and 2000s: the average fund outperformed the S&P 500 by at least 20% over the life of the fund and 3% per year. Findings from a London Business School (2017) study also showed that private equity-backed portfolio companies significantly outperformed similar non-private owned companies on all aspects of growth not limited to EBITDA, sales, and assets post-buyout. The study was based on a sample of 1552 European private equity-initiated deals, executed between 1998 and 2014.

To this end, this outperformance has earned private equity a meaningful allocation in the multi-asset portfolios of many pension funds because strategic asset allocations have been shown to be a critical determinant of investment returns, on a portfolio basis (Ghai and Tarnowski, 2016). Private equity offers investors such as pension funds, which face a widening funding gap, access to outsized return opportunities (McKinsey, 2018). Pension funds' bigger tickets into private equity has also been made possible because of the Pension Protection Act of 2006 which allows larger exposures into private equity funds without classifying such funds as plan assets and subjecting it to various requirements under the Employee Retirement Income Security Act of 1974 ("ERISA") (Graw and DeFalco, 2006).

Opportunities for higher returns such as those offered by private equity are accompanied by higher risks. One of the chief risks in private equity strategies is capital risk, in which the realizable value of one's investment in the asset class, is affected by several factors such as the expertise of the GP, equity markets and foreign exchange fluctuations (Diller and Jäckel, 2015). One of the other chief risks to investing in private equity, is liquidity, which is associated with

selling limited partnership interests on the secondary market at a discount to reported NAV (Diller and Jäckel, 2015).

The following subsections use the examples of buyout and venture capital investments to explain how these opportunity sets expose investors to various types of capital risks. It is then followed by an explanation about why traditional private equity funds are structured as fixed-life closed-ended fund with no rights to redemption and how this exposes investors to liquidity risk.

2.2 Leveraged buyouts

The term private equity is often used interchangeably in the US to refer to the leveraged buyout (“LBO”) industry because this was private equity’s first iteration that manifested in the 1970s (Batt and Appelbaum, 2014). An LBO is the acquisition of a target company, using a combination of debt and equity. Assuming the target company grows in value over time, the equity holders receive significant returns as the cost of debt is typically a fixed cost.

The private equity fund provides the equity for an LBO transaction. Debt financing is typically raised from financial institutions and other investors such as banks and dedicated mezzanine funds. The debt used to finance leveraged buyouts, can comprise senior debt and junior debt. Lenders of senior debt are typically banks whereas lenders of junior debt include dedicated mezzanine funds. Private equity firms also tap into the bond market to raise debt financing or to refinance existing debt. Both senior and junior lenders will typically ask for some form of security, whether in the form of guarantees or security over the assets of the target company. It is typical to see an inter-creditor agreement, describing how enforcement proceeds are to be divided between the lenders.

Batt and Appelbaum (2014) in their book “Private Equity at Work: When Wall Street Manages Main Street”, describe how the buyout model rose, following the decline of the managerial business model (“MBM”). The authors discuss how the MBM model, which decoupled the ownership of a company from the managerial control of a company, was prevalent in the 1950s to the 1970s (Batt and Appelbaum, 2014). Prior to this period, most companies were owner operated as many companies were sole-proprietary businesses (Batt and Appelbaum, 2014).

Under the MBM, shareholders/owners had very little influence over the decision-making process whereas the company's managers were less focused on maximising shareholder wealth, as they were salaried employees that did not own the companies they managed and focused on growing corporate wealth, for the purposes of endogenous strategic gains such as conglomerate building (Batt and Appelbaum, 2014). The lack of emphasis on maximizing shareholder value, led to the low profitability of US conglomerates in the 1970s (Batt and Appelbaum, 2014).

Several regulatory changes in the 1970s, facilitated the uprising of the use of the LBO model. Firstly, the guidelines for what is known as the "Prudent Man Rule" were clarified the late 1970s (Welch, 2014). Per the clarification, diversification was considered prudent investment management, which consequently made it acceptable for pension funds to invest in private equity (Welch, 2014, Morgan Stanley, 2020). Next, there was deregulation around takeover offers, without the consent of CEO's and boards of directors (Jarrell, 1983). The 1982 US Supreme Court's decision, to strike down state antitakeover laws, as well as the deregulation of several industries, also prompted restructuring and merger activity, which are core to buyout firm activities (Jarrell, 1983).

The introduction of the "junk bond", an innovation pioneered by Michael Milken of Drexel Burnham, also provided many hostile bidders, and leveraged buyout firms, with enormous amounts of capital needed, to finance multi-billion-dollar deals (Jarrell, 2018; Leleux, Swaay & Megally, 2015). However, the aggressive use of debt also stressed the cash flows of the operating companies and resulted in many bankruptcies. To provide some further colour on the extent of the equity contributions of private equity firms in this era, in 1988, the average equity contribution to leveraged buyouts was 9.7% (Note on Leveraged Buyouts, 2004). The aggressive use of leverage that weakened the balance sheets of target companies, is what led Ted Frostmann, a private equity investor himself, to refer to buyout firms as "barbarians at the gate" (Leleux, Swaay & Megally, 2015). The fizzling out of the high yield bond market eventually led to a lull period in the LBO market in the 1990s but conditions turnaround in the 2000s following a liquidity surge (Leleux, Swaay & Megally, 2015).

Over time, the LBO industry adapted to using much less debt than they did in the 1980s. Olsen (2004) attributes this to the wariness of highly levered transactions, amongst senior lenders. He also explained that these debt-to-equity constraints, meant it was difficult to generate target

returns in the range of 25% to 30% and led to LBO firms adopting value creation strategies such as roll-ups (Olsen, 2004). This is where an acquired company serves as a platform for additional acquisitions of related businesses, to achieve critical mass and generate economies of scale. These strategies take several years to be completed.

Quarto (2006), a Partner at Clayton, Dubilier & Rice (“CDR”), opined how the LBO model, could be viewed as “transitional ownership that facilitates corporate restructurings”. Companies, owned and managed by private equity firms, undergo several changes to improve the value of the business. These changes include increasing revenue, improving incentives and governance, facilitating a high value exit or sale, making additional acquisitions, replacing management, and reducing costs (Gompers, Kaplan & Mukharlyamov, 2014). A private equity firm will ensure that it has the right to appoint a majority of members on the board of a portfolio company in most LBOs, to influence these value creation activities. Private equity firms also negotiate reserved matters, which prevents a company from approving these matters, without the affirmative vote of the private equity firm’s nominee director. The negotiation of information rights are also part and parcel of a private equity firm’s strategy of active management, as ongoing financial and operating information can create feedback loops, to help the private equity firm navigate and recalibrate value creation activities.

Quarto (2006) provides the example of Rexel, an electrical goods distribution business, that CDR bought from Pinault Printemps Re-doute. The company was described as in “good shape”; however, its former owner was a luxury goods business, paid little focus on developing the company. As a result, Rexel was not going to receive the strategic focus it required, to emerge as an industry leader. Quarta (2015) describes that under private equity ownership, the company emerged as a world leader in its industry. He also explained that the use of financial leverage to boost financial returns, did not come without measures to control risk. Quarta (2015) explained that CDR took on financial leverage to seize opportunities, to increase returns but mitigated risk, by carrying out detailed due diligence on the investment target and intensely negotiating contractual arrangements. In the example of Rexel, CDR needed to have the expertise but also the time, to pursue this strategy.

2.3 Venture capital

Unlike LBOs, venture capital investing involves acquiring controlling minority stakes, in start-up and growth-stage companies. Venture capital investments offer outsized returns as investments are made when valuations are low but execution risks are materially high. It is for this same reason that most companies seeking venture capital, face difficulty in obtaining capital from banks and other conventional financing sources because lenders are not able to traditional structure security packages of any value – the liquidation value of early ventures are virtually nil, since most of these companies are pre-revenue.

Venture capital is synonymous with “high risk capital”, as entrepreneurs developing disruptive technologies require lots of cash, particularly in the early-years of research and development, when the company has not commercialised its products. As with a typical private equity strategy, venture capitalism sees the GP get itself deeply involved, in the management of the start-up. Ventures can go through several rounds of fundraising from venture capital funds, before an exit. Most venture capital investments are typically illiquid until such investment is realized by way of a trade sale or IPO of the investee company.

Like the LBO industry, American venture capitalists benefited from a change in ruling, that allowed pension funds to invest in high-risk assets such as venture capital (Welch, 2014; Gompers, 1994). Unlike the LBO industry, investments in venture capital did not use any debt, so the availability of junk bonds did not necessarily stimulate investment activity. Notwithstanding the above, pension fund commitments to venture capital rose dramatically, increasing annual new contributions to venture capital funds from \$100-200 million during the 1970s, to more than \$4 billion by the end of the 1980s (Gompers, 1994).

Venture capital also rose in significance as a job creator, very much contrary to the reputation of LBOs, the latter of which resulted in many employee layoffs. In an essay titled “The Rise and Fall of Venture Capital”, Gompers (1994) writes,

“Small firms and new business creation have become potent forces of economic development in the United States. Prior to 1980, large firms created many new jobs, in the American economy. During the last decade, however, a major structural shift occurred. Fortune 500 companies lost 4 million jobs. At the same time, firms with fewer

than 100 employees, added 16 million new jobs. This was the first time in the 20th century, that the shift from large to small firms occurred and it represented a fundamental change, in the nature of growth in the American economy.”

However, Gompers (1994) went on, to describe what continues to be a pain point of the industry, relevant even in today’s times:

“The flood of money was a mixed blessing. Many successful firms received venture capital financing and created tremendous growth in both technological development and jobs. The increase in capital also had negative effects on the industry, however, overinvestment in certain industries occurred. Firms backed by inexperienced venture capitalists were brought to market too early. Monitoring of entrepreneurial projects deteriorated. The future health of venture capital depends upon measures that will align the incentives of venture capital investors (i.e., those who invest in venture capital funds), venture capitalists, and entrepreneurs who seek money to finance their project.”

Bob Zider (1998) also made a critical observation, that the industries that received backing from venture capitalist, were those that were likely to look good in the near term. Furthermore, he added that during the period of high and accelerating growth, all companies tend to look similar, as they all are pre-commercialisation. He also pointed out that the challenge for a venture capitalist, is to identify a strong management team, that is able to exploit the growing demand (Zider, 1998).

Arguably, the extent as to which investors take on capital risks in venture capital investing was exposed in the early 2000s. Venture capitalists in the 1990s, were investing heavily in internet start-ups and exiting these investments via IPOs. The general interest in the growing use of the internet, led to an overinvestment in the industry and IPOs of pre-revenue internet companies. However, these companies struggled to make a profit, a phenomenon which ended with the infamous DotCom bust.

2.4 Fund structures aligned with GP objectives

To be able to invest, create value and exit investments – whether venture capital, buyout, or otherwise – at their discretion, GPs need to ensure they have full control over the funds they

manage. This is done by structuring private equity funds in the form of limited partnerships. Limited partnership comprises two classes of partners – the general partner (“GP”) and the limited partner (“LP”). The GP is responsible for the daily management of the partnership and is liable for the company’s financial obligations. In partnership structures, investors hold limited partnership interests, which gives them no control over the day-to-day management of the fund.

GPs also structure closed-ended funds with finite lives of ten years with possibilities of extensions, so that sufficient time is provided to source, select, create value, and exit a portfolio of investments. To provide some context, GPs typically hold LBO and venture capital investments an average of four to six years. (Maher, 2009; Leleux, Swaay & Megally, 2015). GPs also stagger capital calls which means that investors do not have to transfer all their committed capital to the private equity fund upfront. This feature of private equity allows the GPs to “play the clock”, as the IRR of the fund, is calculated using the dates of the various capital contributions and not the day that the fund is launched (Leleux, Swaay & Megally, 2015).

To ensure that the whims of the investor are not a distraction and there is no pressure to prematurely realize investments, GPs will allocate a small window to raising capital at the inception of the fund life and does not allow for any voluntary redemption activities thereafter. This results in liquidity risk because the investor must look to the secondary market to monetize his investment, if desired.

2.5 Conclusion

Section A show how private equity structures are different from those used by mutual funds or hedge funds because GPs structure private equity funds with charter lives of ten years without the possibility of redemptions. This section also elucidates that this type of fund structure accommodates the GP’s need for full control over the activities of the underlying portfolio companies, particularly the timing of exits. This exposes the private equity investor to liquidity risks and, therefore, investors that want to monetize their private equity investments must resort to finding an interested purchaser on the secondary market.

Following a review of the structure of traditional private equity funds, since investors cannot redeem investments, the preparation of periodic fair valuations for private equity funds would serve the primary function of improving transparency as to the performance of one's private equity portfolio and in this way providing a basis to hold GPs accountable for poor performance. Utilizing fair valuations for other activities such as pricing fund interests for sale over the secondary market or to "compare" the performance of one GP versus another would be examples of its derivative uses. In the context of private equity, evaluating GPs relative skill level would be useful in lowering capital risks for private equity investment, particularly because the interquartile range of performance between GPs ranges from 15% to 20% depending on the subtype (compared to managers of public funds where the range is closer to 3%) (Lerner, 2022).

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Section B

Section B reviews the profile of private equity investors and explains the tools that these investors use to manage capital risks stemming from GP exposure.

2.6 Primary and secondary investors

Private equity investors typically fit the profile of accredited investors with deep pockets because of two reasons (i) GPs avails several regulatory exemptions so long as it offers investments to accredited investors and (ii) many private equity firms prefer to accept minimum commitments of between US\$5 million and US\$10 million, although GPs have the discretion of accepting less (Leleux, Swaay & Megally, 2015). Private equity investors can be further categorized into primary investors and secondary investors. The following subsection explains how each type of investor approaches investing in private equity:

Primary investors

Primary investors subscribe to limited partnership interest at a fund's fundraising period, which typically lasts between twelve and eighteen months after a fund's inception ("Fundraising Period"). At such period, most investors make capital commitments to a blind pool fund with nil or seed investments (Kemmerer and Weidig, 2005). Investors cannot break their commitments to private equity funds under normal circumstances (Leleux, Swaay & Megally, 2015). Therefore, adequate due diligence as well as ensuring LPs are contractually protected are of prime importance when making investments in private equity.

To support an LP with due diligence activities, the GP will provide the investor with a private placement memorandum ("PPM"), a "pitchbook", and the Limited Partnership Agreement ("LPA"), to evaluate the opportunity to invest in the fund.

The PPM provides an overview of the investment strategy, the minimum capital commitment to the fund, target fund size, type of investments, style of investing, investment horizon, fund life, target rate of return, as well as the different types of fees charged. The PPM is also used to inform investors of the illiquid nature of the investments and the restrictions that exist on attempting to transfer private equity interests, tax considerations and conflicts of interest. The PPM will also include details on management biographies and track record. It will also inform

the investor of the existence limited partner advisory committees, valuation committees and investment committees, to support with governance aspects of the fund's operations.

The PPM will also be accompanied by the LPA. This legal document governs salient aspects of the operations of the fund such as the mechanism for draw downs and distributions, authority and power of the GP, transfer of capital commitments, types of fees, chargeable expenses, frequency of partnership meetings, matters concerning life of the fund as well as the investment policy. The LPA also stipulates the frequency and contents of the reporting package, which can include the financial statements, a capital account statement indicating the net asset value attributable to each limited partner, written commentary on the fund's performance, as well as a schedule of fair valuation of portfolio investments.

The fund's pitch book, sometimes also referred to as a pitch deck, is usually presented as a slide deck, because it is a supporting document that is used to market the fund's investment thesis. The pitch book tells the "story" that the fund manager is trying to sell to the investor. This is an important aspect of private equity investing: besides rational drivers, private equity investing tends to be emotional (Leleux, Swaay & Megally, 2015). Investors want to believe they are behind the support of new-age technology, entrepreneurs and more directly involved in "real" business (Leleux, Swaay & Megally, 2015).

A private equity firm's track record is often included in either the PPM and/or the pitch book and can include the performance of funds that have run through to completion; however, it is more common to see track records that present interim IRRs or interim net asset values of the most recent predecessor funds. These interim IRRs also referred to as accounting IRRs because they are calculated using the either a mixture of cash distributions and unrealized fair valuations or even just unrealized fair valuations. The track record is important for two reasons. Firstly, the track record conveys some information about ability and even if no reliable numbers can be presented, experience itself is regarded as an asset (Fenn, Liang, and Prowse, 1995).

When presented with the abovementioned marketing and legal documents, many investors prudently amend the LPA to agree on the penalties, incentives, and information rights, to shape the behaviour of GPs. The private equity governance model, which sees the innovative use of mechanics such as compensation incentives that reduce the principal-agent problems, has even been referred to as a "corporate governance nirvana" (Cendrowski, 2012 cited in Welch, 2014)

to describe the ideal set of circumstances and actions that are available to LPs to influence GP behaviour.

- *Incentives*

One of the most important ways investors shape the behaviour of GPs is by ensuring an alignment of interests and providing adequate incentives. Investors typically require that GPs make token investments equivalent to one (1) percent to two (2) percent, of the size of the funds they manage. Recent trends see this number going to north of three (3) percent. To strongly incentivize GPs to exit investments at the highest possible value, it is also common to private equity funds pay performance fees, also called the carried interest, to the GP.

The structuring of what is referred to in the private equity industry as “carried interest” has an interesting story behind it. It took root between the 16th and 17th century when voyages to the Americas and Asia were funded by private investors. Private investors would compensate the captains of the cargo ships, by paying him 20% of the profit from the carried goods, by way of compensation, for the arduous journey of transporting the goods to Asia and Americas (Cohen, 2008 cited in Kocis 2009). In a similar fashion, should a fund’s net cash return to investors exceeds a pre-agreed compounded rate of return (also referred to as the “preferred return” or “hurdle”), under a traditional private equity model, a GP is entitled to 20% of all the profits once the fund has returned aggregate cash flows equivalent to a preferred return of 8% calculated on capital contributions. It is important to appreciate that the quantum of the carried interest and hurdle rate varies. Leleux, Swaay & Megally (2015) state that the hurdle rate is pegged to long-term public equity return and is, therefore, in the range of 5% to 8%, whereas carried interest can also reach 30% for top-tier US venture capital firms. It is also important to appreciate that the carried interest is payable on top of the base management fees the private equity funds, for the day-to-day operation of the fund in question.

The quintessential importance of the carried interest, when compared with the alternative of just a plain vanilla management fee, is clearly argued in in Cornelius et al.’s (2013) book “Mastering Illiquidity: Risk Management for Portfolio of Limited Partnerships”. In this book, the authors describe how base management fees are paid, regardless of the fund’s performance and, therefore, fails to provide an incentive to outperform, unlike the carried interest. Similarly, excessive, and quasi-guaranteed base management fees, stimulate tentative and risk-averse

behaviour, such as following the herd. It is, therefore, argued that the compensation of private equity firms, creates optimal conditions to generate high returns for investors.

In the context of buyout firms, Jensen (1999) argues that the “high-powered” incentives for the private equity managers, combined with concentrated ownership stakes in portfolio companies, leveraged capital structures and active governance frameworks used by private equity funds, created conditions for optimal returns, vis-a-vis public corporations with dispersed shareholders, low leverage, and weak corporate governance.

- *Protective mechanisms*

Besides structuring incentive payments, investors also use the LPA to structure various protective mechanisms, particularly when the GP has breached fiduciary duties or engaged in some other form of misconduct. These protective provisions take the form of allowing the LP to remove and replace the GP in circumstances where misconduct is determined to have occurred (Leleux, Swaay & Megally, 2015; Jamieson and Dhume, 2016). Notwithstanding, it is also common to see LPs negotiate rights to remove and replace a GP following a supermajority vote of the LPs (Leleux, Swaay & Megally, 2015, Jamieson and Dhume, 2016). Investors are also increasingly protecting themselves from having to continue to invest in funds where key professionals have left by introducing what is known, as “keyman clauses”. In such scenarios, the ability for a GP to continue making capital calls is suspended once a key man clause is triggered and if such event goes unremedied then the fund faces the permanent termination of the investment period.

- *Information rights*

Investors also use information rights, to ensure they are kept abreast of portfolio developments. These updates may be qualitative or quantitative in nature. Investors may even request to see GPs prepare financial statements in compliance with certain accounting frameworks such as US GAAP or IFRS to meet their own reporting requirements. It is also common to see investors stipulate the frequency and contents of the investor reporting package. These can include information such as the performance of each portfolio company, information about portfolio activity such as investments and exits, as well as a profit and loss and balance sheet for the fund. Leleux, Swaay & Megally (2015) report that good reporting is critical to allow investors to follow the evolution of the fund, to understand how the GP is creating value. They also

caveat that private equity reporting is tremendously challenging because it is difficult and arbitrary to value a portfolio position before it is sold. Notwithstanding, private equity investors receive in-person reports by way of annual investor meetings and informal meetings throughout the year (Leleux, Swaay & Megally, 2015).

- *Investment Consultants*

To cope with the challenges of private equity investing, many private equity investors also engage investment consultants specializing in the asset class, to evaluate the risk profile, sophistication, and investment styles, of private equity fund managers (Fenn, Liang, and Prowse, 1995). In fulfilling the needs of this service, investment consultants look at areas such as organization structure/operations and personnel, investment process, fees, performance, portfolio fit, client risk tolerance, client’s understanding of the investment strategy, the investment managers ability to meet client service needs, as well as other areas important to the client, such as compliance with code of conduct standards (Cambridge Associates, 2022). One such investment consultant, Cambridge Associates, writes that their offering is supporting with finding and investing with managers that can deliver outperformance despite the challenge of private equity investing which involves investigating a complex and vast data set of private equity firms (Cambridge Associates, 2022).

Secondary investors

Secondary investors acquire limited partnership interests in private equity funds (“secondaries”), at any other time in the fund cycle other than the Fundraising Period. As a result, the funds that secondary investors take positions in may be either partially funded or fully funded and the underlying portfolios may be young and undeveloped (“manager secondaries”) or mature and ready for exits (“financial secondaries”). Secondary investors acquire secondaries in what is referred to as the private equity secondary market. However, these sales are not as straightforward as selling shares on a stock exchange. Secondary sales can be proprietary or auction-based and typically involve onerous and complex contractual negotiations, to transfer one’s partnership interest and unfunded liabilities from the seller to the purchaser. In many transactions, *sellers* rely on the reported NAV to price the private equity interests that are put up for sale (Leleux, Swaay & Megally, 2015).

Although most private equity investors commit to private equity funds without the intention to sell, certain conditions can compel primary investors to initiate such transactions. The secondary deal flow during the GFC, for example, was driven mainly by investors under liquidity pressure (inability to finance capital calls / raising cash for other purposes), undertaking portfolio management (reducing exposure to certain asset managers) or complying with regulatory requirements (inability to hold private equity investments due to regulatory changes such as the Volcker Rule / Basel III). In recent years, GP-led liquidity restructuring transactions, have also contributed to secondary deal flow (Navatar Group, 2017). These deals are driven by GPs facing end of life issues because of funds, that have failed to realize portfolio companies, within the finite fund life of the fund (Navatar Group, 2017). As a result, the GPs look to the secondary market to recapitalize these funds and provide existing LPs with an exit (Navatar Group, 2017).

The prominent profile of secondary purchasers are private equity funds offering their investors outsized returns for an opportunity to invest in this niche area. These secondary investors are looking to exploit mispricing in the portfolio companies or negotiate deep discounts for providing liquidity (Scarpa et al., 2015). Leleux, Swaay & Megally (2015) write that the cost of providing liquidity results in positions that are traded at 20% discounts. To put this into perspective, the secondary market has grown from a \$2 billion to over \$100 billion (Lodge, 2021). However, this still only represents less than 1.5% of the overall private equity market (Lodge, 2021).

2.7 Conclusion

One of the two key takeaways of Section B is that there are two types of private equity investors: primary and secondary. Primary investors subscribe for limited partnership interests during the Fundraising Period whereas secondary investors acquire limited partnership interests in partially or fully funded private equity funds. The other take-away is that investors use a wide array of tools to manage their capital risks such as by structuring incentives, introducing means to terminate the relationships with GPs or to suspend capital calls to reduce capital exposure, negotiating information rights and, finally, engaging the help of investment consultants. The capital risks of secondary investors vary depending on whether one is investing in a manager secondary or a financial secondary.

Section C

The objective of this chapter was to examine why, how, and when investors can use FVA. What can be appreciated by the findings of this chapter is that GPs assemble a single portfolio during the investment period, create value, and monetize these investments over several years. Therefore, investors make capital commitments to blind pool funds during the Fundraising Period. Similarly, GPs want full control over when they exit an investment and, therefore, do not provide investors with the right to voluntary redemptions under traditional private equity fund structures. As a result of these restrictions, FVA is of no relevance as a pricing tool to primary investors because investors share in the distributions of the fund – the timing of which is controlled by the GP.

Notwithstanding the above, FVA can help to reduce the information asymmetry between the GP and the LPs by providing an indicative number of realizable value at the reporting date. Additionally, periodic FVA information can be argued as being relevant and decision-useful to investors for the following reasons. Firstly, FVA can be used to track the trajectory of the fund's performance, which can be telling of a GPs skill i.e., FVA could qualify as useful add-on to an investor's due diligence toolkit to reduce capital risks through benchmarking activities. To explain, there is large dispersion in private equity returns: the interquartile range of performance between GPs ranges from 15% to 20% depending on the subtype vis-à-vis manager of public funds where the range is closer to 3% (Lerner, 2022) making it important to be able to evaluate GP skill as a means of managing capital exposure risks. Patterns on performance suggest performance is sticky in private equity funds, although persistence weakens over time (Lerner, 2022). Therefore, investors can use fair valuation data as a source of intelligence. Some investors can even use this data to calibrate exposure to certain GPs or to enforce its rights to remove and replace a certain GP. The latter is made possible because of a growing trend amongst investors to secure rights to remove and replace the GP at no fault of the GP (also referred to as “no-fault divorces”) (Jamieson and Dhume, 2016). Secondly, FVA can also be used to accrue for carried interest, to provide a more accurate depiction of the returns an investor would be entitled to net of carried interest.

As explained in Section B, secondary investors acquire limited partnership interests in partially or fully funded portfolios. In addressing the needs of secondary investors, FVA could be argued as a means for secondary investors to price limited partnership interests, particularly for more

mature portfolios such as financial secondaries. However, if the dominant type of secondary buyer is a speciality fund seeking outsized returns, then such investors may have to actively seek opportunities where fund net asset values (“NAVs”) are under-priced (Scarpa et al., 2015) or where a seller is willing to accept a discounted offer price to account for estimation uncertainty in fair valuations. This means that a private equity fund’s NAVs, whilst useful as a benchmark for sellers to price private equity interests (Leleux, Swaay & Megally, 2015), may not go unchallenged by the secondary buyer.

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3 The Fair Value Accounting Era

Chapter Two provides an argument of how FVA can be relevant and decision-useful to private equity investors. The objective of the following chapter is to narrate the story of how FVA found its relevance with the financialization of the US economy and how FVA concepts grew to acceptance amongst the private equity industry in the early 2000s. The final objective of this chapter is to delineate the challenges and transformative effects of the FVAF.

Section A begins with an overview of the events that led to the FASB's decision to support FVA as well as description of how the FVAF earned institutional support from political actors following certain events in the early 2000s. Section B describes the rise of FVA in the private equity industry and the subsequent challenges and scale of impact that ensued after the adoption and implementation of ASC Topic 820. Section C describes how the FVAF has transformed the regulatory and corporate governance landscape for private equity funds.

Section A

3.1 The history behind the shift to fair value accounting

The US has a reputation for being a leading standard setter, particularly in the field of accounting. It can be argued that it has earned this title at the expense of having to respond to financial calamity very early in the 1900s (Investor.gov, 2022). By the mid-1930's, the US had already faced the Wall Street Crash of 1929 and was reeling from the Great Depression. To regain public trust in the capital markets, the US federal government enacted the Securities Act of 1933 and subsequently the Securities Exchange Act of 1934, which also established the Securities and Exchange Commission (SEC) as the agency primarily responsible for enforcement of United States federal securities law (Zeff, 2007; Investor.gov, 2022).

A look back at history shows that the SEC was not resolute on the institutionalisation of FVA because of concerns that these numbers can be manipulated. Georgiou & Jack (2011) write that mixed measurement accounting that incorporated market values found support before the 1940s and after the 1970s. However, during the period in between, the SEC emphasized on the use of historical cost accounting because of a strong view by one of the five founding SEC Commissioners, Robert E. Healy (Zeff, 2007). Healy, who was the General Counsel of the

Federal Trade Commission from 1928 to 1934, had directed a six-year investigation into the market manipulations by public utility holding companies wherein he discovered that these companies were writing-up asset values to create income, which led to significant amount of havoc when the crash came in 1929 and 1930 (Zeff, 2007). He also once captured his thoughts on the matter stating, “*I think the purpose of accounting is to account – not to present opinions of value*” (Zeff, 2007).

Despite Healy’s support for an objective basis of accounting, the use of historical cost accounting was challenged in the late 1950s. At this juncture, the American Institute of Certified Public Accountants (AICPA), a national professional organization of Certified Public Accountants in the US founded in 1887, established the Accounting Principles Board (APB) and the Accounting Research Division (ARD) (Emerson, Karim, and Rutledge, 2010). The AICPA tasked the APB and ARD with reducing the number of accounting practices under GAAP, codifying GAAP as well as providing proactive solutions to emerging issues in the accounting era. In what would be the first reference to fair value accounting, the ARD released a study in 1962, referred to as ARS 3, wherein it recommended that any changes in the value of assets that could be “objectively determined” should be recognized which included events such as changes in price levels, changes in replacement costs, and changes due to other causes (Emerson, Karim, and Rutledge, 2010). The suggestion was shut down quickly by the AICPA stating that the study was a valuable contribution to accounting thinking but was too radical for acceptance at that point in time (Emerson, Karim, and Rutledge, 2010).

However, more lobbying for the adoption in what is now known as “fair value accounting” came two years later in 1964 when a separate body, the American Accounting Association (AAA), a voluntary organization of persons interested in accounting education and research founded in 1916, formed a committee to develop an integrated statement of accounting theory (Emerson, Karim, and Rutledge, 2010). The committee published a monograph entitled “A Statement of Basic Accounting Theory” (ASOBAT), which recommended that four standards be adopted and adhered to when disseminating accounting information, namely, relevance, verifiability, freedom from bias and quantifiability (Zeff, 1999; Emerson, Karim, and Rutledge, 2010). The highest status was given to relevance as this it was proposed that the usefulness of accounting information is directly related to its relevance (Emerson, Karim, and Rutledge, 2010). Verifiability was given a lower status as the objective determination of balances is less

pertinent to the user than the relevance of balances. Notwithstanding these deliberations, the committee eventually concluded that financial reporting should display information from historical and current value models (Zeff, 1999).

More momentum for FVA manifested in the 1970s. In 1971, the AICPA formed two separate committees to review the prevalent accounting practices and the processes of developing accounting standards (Emerson, Karim, and Rutledge, 2010). One of the committees, the Trueblood Committee, was tasked with developing the objective to financial statements (Emerson, Karim, and Rutledge, 2010). The other committee, the Wheat Committee, which was tasked with reviewing rule making under APB (Emerson, Karim, and Rutledge, 2010).

The Trueblood Committee proposed that the concept of fair value accounting was useful to users in making economic decisions and that the needs of financial statement users could not be served using single valuation basis such as historical cost. However, the Trueblood Committee also suggested that financial statement users be empowered to make their own predictions on the impact of current events on enterprise earning power and that some simple quantifications should be supplemented to represent their actual complexities by disclosing rates of precision, reliability, and uncertainty (Zeff, 1999).

The Wheat Committee recommended that a new structure be created to generate and implement financial standards. Following the recommendations of the Wheat Committee, the Accounting Principles Board was replaced by the Financial Accounting Standards Board (FASB) in July 1973. The FASB was to serve the role of an independent board comprised of members that had no links to their former employers and private firms (Zeff, 1999). Not long after its establishment, the FASB was tasked with tacking the entire hierarchy of financial accounting theory beginning with the Trueblood report (Zeff, 1999).

Although there was a significant amount of discourse around the use of fair value accounting in the 1970s, it was not until several issues with the banking sector manifested in the 1980s that proponents of FVA were able to advance its use (Detzen, 2016). Between 1980 and 1991, more than 1500 commercial and savings banks as well as 1200 savings and loans associations failed (Kaufmann, 1995). In the 1980s, the banks were in the news for gains trading, an activity which involved selling certain assets to manage earnings (FASB, 1993). In gains trading,

appreciated securities are sold to recognize gains but securities with unrealized losses are held and because the amortized cost method is used, unrealized losses are not recognized (Detzen, 2016). In September 1990, the chairman of the SEC, Richard C. Breeden, pointed to these problems and indicated that, for banks and thrift institutions, serious consideration must be given to reporting all investment securities at market value (Detzen, 2016; FASB, 1993). There was also a growing awareness that traditional accounting approaches were obscuring the real value of derivatives (Haldane, 2009).

This eventually led to the release of FAS 115 in May 1993, a statement that required that fair value reporting be used for debt and equity securities that are bought and held principally for the purposes of selling them in the near term or available for sale.

Douglas J. Johnson, an accountant and partner with Ernst & Young in Atlanta, G.A., addressing the Society of Actuaries, provided a spectator account of how the regulators were solving for problems with the use of cost accounting in banking organizations but in his narrative, he also explains why FAS 115 implicated the entire system of financial institutions (Johnson et al. 1996):

“ In 1990, the real pressure came from the SEC. The SEC actually called for market-value accounting for financial assets for banks. They wanted that done, pushed, and completed. That pressure caused the AICPA to issue a Standard of Practice (SOP) called SOP 90-11. Again, it expanded much of the disclosures relating to financial instruments and it was primarily related to banks, insurance companies, and other financial institutions. The FASB also got in the act at that point in time and developed FAS 107 which was a much broader disclosure. The other thing which was occurring in the FASB, and still continues to occur in the FASB, is a belief that all companies should have the same set of rules and the same set of financial statements. They shouldn't look any different. FAS 107, even though it really started with the a banking inference, was brought into other financial institutions. It was applicable to all companies, no matter what industry the company happened to be in. Now, clearly, most of the financial assets and items that you could estimate fair value on were issues relating to banks and insurance companies, not manufacturers and others. But, it is applicable to everybody.

At the same time, the FASB agreed to put the market-value accounting issue on their agenda; which they did. That resulted in what we're talking about, FAS 115. It came out in 1993 and became effective January 1, 1994. So, the point I wanted to make is that all of this started with the banking industry. The insurance industry became caught up in it for a variety of reasons.” (Johnson et al., 1996)

The SEC had also provided the same view in a letter to the Joint Working Group of Standard Setters (“JWG”) on the latter’s draft standard on Accounting for Financial Statements and Similar Items (Turner, 2001). To provide some context, the JWG comprised representatives or members of accounting standard setters or professional organisations in Australia, Canada, France, Germany, Japan, New Zealand, five Nordic countries, the United Kingdom and the US (JWG, 2000). The JWG was tasked with purposing a comprehensive model for fair value accounting (JWG, 2000). In their analysis, the JWG had concluded that fair value was the most relevant measurement attribute for all financial instruments and that sufficiently reliable estimates of the fair value of financial instruments are obtainable for financial reporting purposes, with the exception of certain private equity investments (JWG, 2000). However, the SEC disagreed. The Chief Accountant of the SEC, Lynn E. Turner (2001), wrote that *“for all companies that record financial instruments on their balance sheets (i.e., there should not be a carve-out for particular industry groups). Although some industry segments believe they are different, transparency in financial statements should transcend industry groupings.”*

Similar to the public utility companies in the pre-1930 era, issues with FVA began to show in the early 2000s. The case of Enron had shaken the investor community’s confidence in fair values. Enron was the first non-financial company to use mark-to-market accounting to account for its complex long-term gas contracts and derivatives (Gwilliam and Jackson, 2008). Enron’s management was using fair valuation to lock-in gains but not necessarily to reflect losses (Gwilliam and Jackson, 2008). Moreover, these valuations, which were undertaken by third parties for significant fees, were frequently highly optimistic and not necessarily independent (Gwilliam and Jackson, 2008).

In May 2002, in a testimony concerning the roles of the SEC and the FASB in establishing US GAAP, the Chief Accountant of the SEC, Robert K. Herdman, mentioned that events at the time and press articles had raised questions on the transparency and accounting and disclosure

practices of certain companies. Herdman mentioned the implosion of Enron, the indictment of Arthur Andersen as well as the bankruptcy of Global Crossing as having cast doubt on the quality of the financial information investors were receiving (Herdman, 2002).

Herdman (2002) indicated that the SEC had a unique position in the financial reporting process and had authority under the securities laws of the US to set accounting standards to be followed by public companies and the power to enforce those standards. He pointed that the SEC looked to the private sector for leadership in establishing and improving accounting methods used to prepare financial statements. Herdman (2002) then indicated that major projects had been added to FASB's agenda at the behest of the then-current Chief Accountant of the SEC because of the problems the SEC observed in practice. He cited several projects, one of which was the accounting of financial instruments at fair value (Herdman, 2002). He mentioned that certain fair value measurements at that time used models without objective inputs that may have brought to question the quality of the financial reporting process (Herdman, 2002).

The FASB released its exposure draft for the Fair Value Measurements Statement not long after Herdman's (2002) speech. The FASB received 93 letters from regulators, third party valuers, industry boards and industry representatives in response to the draft. Among these letters was one from the Fed, the content of which encapsulated the key concerns that had shaped the way the fair valuation standards were constructed.

The Fed voiced its chief concern regarding management bias in determining estimates for illiquid assets and liabilities within banking organizations. The Fed summarized its key concern with the following statement: "each estimate is based on the institutional own evaluation, this approach does not resolve incentive problems in reporting unbiased estimates versus estimates that best serve the valuer's own interests" (Bies, 2004). It alluded to this bias being evident in overvaluation of residual tranches in securitizations and claimed that bank failures stemmed from the write-down of these assets. Although the Fed qualified that such misstatements may have stemmed from "fraud", it blamed the lack of valuation guidance for facilitating deviant behaviour (Bies, 2004). It also demanded more prescriptions around choice of market inputs, stressing that management continued to have significant discretion in selecting market inputs in valuation exercises (Bies, 2004). Towards the end of the letter to the FASB, it was clear that the Fed had verifiability and auditability of fair valuations on its agenda (Bies, 2004).

In 2006, the FASB introduced SFAS 157, a fair value accounting standard under US GAAP, that is now referred to as Accounting Standard Code Topic 820 (“ASC Topic 820”) (Pwc.com, 2019a). Fair value is defined by the FASB as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date”. One of the most important features of the FASB’s fair valuation framework, is that it introduces the concept of a 'fair value hierarchy'. The hierarchy categorizes the inputs used in valuation techniques into three levels. The hierarchy gives the highest priority, to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 inputs) and lower priority to unquoted inputs (level 2) and unobservable inputs (level 3), in descending order of priority (Pwc.com, 2019a).

3.2 The harmonization of SFAS 157 and IFRS 13

The consequence of the introduction SFAS 157 may have only affected organizations subject to US GAAP. However, SFAS 157 had far reaching impact because the IASB, the rival standard setter to the FASB, had contemporaneously entered a partnership with the FASB to converge the two accounting standards (Deloitte, 2012). The IASB is an independent accounting standard setting body. The IASB, which was founded in 2001, is responsible with developing International Financial Reporting Standards (IFRS) (previously known as the International Account Standards) (Deloitte, 2012). The European Union (EU) adopted IFRS as its financial reporting standard in 2002. There was a strong momentum in the adoption of IFRS following the EU’s endorsement resulting in over 100 countries that either require or permit the use of IFRS (MOF, 2022). In other words, the IASB became an influential and powerful standard setter.

The IASB’s support for converging fair valuation frameworks was driven by two reasons. Firstly, the SEC was considering adopting IFRS for use by organizations in the US (Deloitte, 2012). Secondly, in 2009, the Leaders of the Group of 20 (“G20”) issued a statement calling for the convergence of accounting standards in member nations by 2011 with the objective of improving the global financial system (Deloitte, 2012). To add more colour to this point, there was a desire to develop a single international reporting language so that investors could compare relative performance across jurisdictions and assess investment opportunities on a like-for-like basis (MOF, 2022). The fair valuation project was flagged as one of the accounting

projects that required reconciliation as part of a Memorandum of Understanding (MoU) between the boards (Deloitte, 2012).

As a result of the MoU, the FASB and IASB worked closely together to ensure that fair value had the same meaning in US GAAP as it did in IFRS (IFRS, 2009). In 2009, the FASB and IASB issued a joint statement that they would agree to make fair value measurement requirements the same other than minor necessary differences in wording or style (IFRS, 2009). The boards also had reached an understanding that they would collectively address misconceptions regarding differences (IFRS, 2009). In May 2011, the IASB introduced IFRS 13, essentially the IFRS equivalent to ASC Topic 820 with different words to express the same requirements i.e., ASC Topic 820 and IFRS 13 provide a harmonized definition of fair value, establish a framework for measuring fair value and requires disclosures regarding fair value to increase consistency and comparability in fair value reporting (IFRS, 2011).

3.3 Summary

This section is also important because it describes how US regulators use the accounting architecture to improve information disclosure and protect investor interests. It also brings attention to the fact that issues exogenous to the private equity industry were responsible for the re-architecture of a key component of the accounting framework set by the FASB and subsequently by the IASB. What is also noticeable in this section is some reference to private equity's difficulty in implementing FVA and a refusal by the US regulators in acquiescing to any exceptions.

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Section B

3.4 The rise of fair value accounting for private equity

ASC Topic 820 and IFRS 13 are standards on how to measure fair valuations. They do not indicate when an organization must use FVA. Other accounting standards indicate when FVA is required or permitted. For example, in the US, private equity funds subject to “FASB ASC Topic 946, Investment Companies” requires assets to be reported at Fair Value (IPEV, 2012). In 2009, the IASB issued IFRS 9, Financial Instruments, which means that equities that do not have prices quoted in an active market and whose fair values cannot be measured reliably are no longer precluded from being subject to fair valuations (Palea, 2015).

The use of ASC Topic 820 and IFRS 13 is a huge departure from private equity’s legacy valuation practices and the flexibility in valuing investments the industry was accustomed to under its legacy accounting framework. The following sections explain the actors and events that advanced the use of the FVAF for private equity.

Legacy practices

Prior to the introduction of Dodd-Frank Act, the private equity industry was availing exemptions under the Investment Advisers Act of 1940, such as by raising capital only from accredited investors, to preclude it from having to register as an adviser with the SEC (Morgan Lewis, 2015). This allowed private equity to operate away from the public eye and gave it a great degree of freedom to run nimble businesses. However, this also resulted in a lack of uniformity in various areas of its business such as financial reporting and valuations.

Kemmerer and Weidig (2005) report that there was no consistency in the frequencies (half-year or quarterly), aggregation levels (portfolio company or fund level NAV) and delivery times of reporting (number of days after measurement date), which was found to be related to characteristics such as experience (first time fund manager or not), type of assets under management (venture capital or mid-market buyouts) and focus (regional, non-regional, technology or non-technology). The industry’s valuation practices were also varied. There were certain private equity funds that were subject to FVA requirements because these funds had raised significant amounts of capital from pension funds starting the late 1970s (Easton, Larocque and Stevens, 2019). To expound, pension fund reporting required the use of fair value accounting for investments (Easton, Larocque and Stevens, 2019). However, there were also

other funds that would mark securities at cost unless they were discretionarily written down by the GP or marked-up because of an arms-length transaction (Fenn, Liang, and Prowse, 1995). Others were noted to be strategic with write-ups: GPs tended to be aggressive in the pricing of their portfolios at around fundraising periods (Anson, 2002).

Because of the confusing and hard-to-verify accounting information, the first wave of private equity investors preferred to look at the cash returns of a mature fund than the accounting return of a young fund to evaluate GP skill (Fenn, Liang and Prowse, 1995). It is also useful to note that these investors were also managing the challenges of investing in illiquid private equity strategies by carrying out pre-investment due diligence and engaging consultants to support with the construction and management of their private equity programs (Fenn, Liang and Prowse, 1995).

There was, however, a notable change in investor attitudes towards the industry's performance metrics in the early 2000s because of widespread concerns that private equity investments were dramatically underperforming because of the DotCom bust (Creswell, 2003). It is important to recognize that distribution activity would have dried up post the DotCom bust leaving many investors without any form of data to evaluate fund performance because the industry's legacy valuation practice was to hold investments at cost or latest equity raise. The downside of such valuation practices was it also allowed GPs to hide deteriorating values (CCBJ, 2007). This sparked interest in private equity's valuation practices: Brull (2003) explained that imprecise valuations might have been tolerated during the bubble of 1990s, when everybody was getting rich, but the bear market in the 2000's had put a "higher premium on precision" in reporting. In other words, FVA was a means of reducing information asymmetry between the GP and the LPs in markets when cash returns were abysmal.

It is also useful to consider that many pension funds and endowments were increasing exposures to the asset class prior to the DotCom bust. Certain university endowments, such as that of Yale University's, invested almost a third of its portfolio in private equity whereas pension funds had invested an average of 5.6% to 7.3% at around the same time (Tuck School of Business, 2003). Pension funds and endowments collectively accounted for more than fifty percent of capital commitments made to private equity funds at the material time (Tuck School of Business, 2003). The increasing commitments from such investors together with role venture

capitalists played in the DotCom bust had at around the time fuelled the public's monomania on private equity's performance. This led to many requests for information on private equity returns under the Freedom of Information Act ("FOIA"), a law enacted by the US Congress in 1967 (Leleux, Sway and Megally, 2015). To provide some background, FOIA gives the US public the right to request access to records from any federal agency, unless such information is exempted from disclosure (Foia.gov., 2022).

What set public attention to high gear, however, was the three-way tussle that sparked between the private equity industry, its investors, and the public, following an incident when reporters from the San Jose Mercury News challenged The California Public Employee Retirement System ("CalPERS"), US' largest pension fund, in court following a refusal by the latter to comply with a FOIA request to release return information on its private equity portfolio. CalPERS lost that suit and was forced to disclose IRRs on its private equity fund investments on the account that the public had the right to know how the retirement scheme performed and hold officials accountable for performance (Leleux, Sway and Megally, 2015).

The success of San Jose Mercury News lawsuit led to similar demands for information from federal agencies investing in private equity (Leleux, Sway and Megally, 2015). However, many GPs reacted to the court win by forcing out or refusing to admit investors subject to FOIA (IVCA, 2006; Primack, 2020; Leleux, Swaay & Megally, 2015). There crux of the issue was that there was rising concerns that sensitive portfolio-level information would be disclosed to the public or land in the hands of rival businesses because FOIA laws were enforced differently across the states because of ambiguity in its drafting (PEI, 2005). The matter eventually subsided because many US states were passing laws that limited FOIA disclosures to fund level information in order to protect the interests of private equity funds by ensuring portfolio company information remained confidential (Cohen, 2005). However, the entire fiasco had, nevertheless, brought the topic of private equity reporting to the fore. It is worth noting that when the UK introduced the UK Freedom of Information Act in 2000, affected private equity investors were also receiving similar requests to disclose performance information from various organizations (Terras, 2015).

3.5 The emergence of standard setters

The confluence of public attention and federal agencies simply carrying out their fiduciary duties led to pressure on the private equity industry to provide useful and standardized financial

reports. Consequently, two task forces on either side of the Atlantic set out to construct valuation guidelines for private equity funds: the US-centric Private Equity Industry Guidelines Group (“PEIGG”) and the EU-focused International Private Equity and Venture Capital (“IPEV”) Committee. The CFA Institute also revised the Global Performance Investment Standards (“GIPS”) to address performance measurement in private equity, which they felt was essential because of the unique characteristics of the private equity market (Kemmerer and Weidig 2005). However, these were high level guidelines vis-à-vis the regional guidelines provided by the PEIGG and IPEV (Kemmerer and Weidig 2005).

PEIGG

The PEIGG was the first group in the US with the collective mission to promote reporting consistency and transparency within the private equity industry. The volunteer group, which comprised a mix of GPs, LPs, and industry advisors, were determined to create a set of standard guidelines for the content, formatting, and delivery of information (CCBJ, 2007). The PEIGG released several versions of its valuation guidelines, the first one in the calendar year 2003. At that juncture, the focus was on educating the industry on the importance of using FVA concepts. The PEIGG explained to GPs that LPs had the obligation of reporting their financial information for their own organizations using GAAP, which required compliance with FVA concepts. Investors also wanted to monitor and evaluate interim performance which was only made possibly if GPs used consistent valuation methodologies to evaluate what was happening over time (CCBJ, 2007). The PEIGG’s guidelines also recommended that private equity firms report valuations on a quarterly basis and that GPs improve governance over fair values by seeking the input of semi-independent valuation committees over GP prepared fair values (Meikle, 2003). Firms that co-invested in a single company were also asked to confer and prepare a single valuation for the company (Meikle, 2003).

The PEIGG valuation guidelines was not well-received. They were not endorsed by the National Venture Capital Association (“NVCA”), a group representing members represent a diverse set of venture investors, including venture capital partnerships, corporate venture groups, seed capital, growth equity firms, and university innovation funds (Miekle 2003), although the NVCA later issued a statement that it believed the guidelines be readily available for its members for reference and use (NVCA, 2012). The immediate feedback by the rest of the industry was tepid. Jim Breyer, a general partner with Accel Partners, indicated that he had

plans partly to adopt the guidelines. He agreed with the notion that carrying an investment at cost when the cost is unfairly high would be reckless, however, he was concerned that the write-ups of portfolio companies without third-party validation (Meikle, 2003). He was afraid this was a slippery slope because it would lead to “arbitrary valuations” when it came to write-ups. Another limited partner that wanted to remain anonymous also pointed to the difficulty in ascertaining value, “*What good does it do me if two firms agree on a valuation, but they are both wrong?*” (Meikle, 2003).

Confidentiality concerns continued to linger in the air, particularly on the back of the FOIA/IRR disclosure debacle. GPs were reluctant to divulge too much information on the portfolio companies under management as the exposure of such data would compromise a portfolio company’s competitive position (Brull, 2003). In the words of an onlooker “*They fear that financial or qualitative information could tip off outsiders about a strategic breakthrough or competitive weakness*” (Brull, 2003). Jesse Reyes (2012) also presented a similar view “*... some claim that too much transparency in the private equity context is much like killing the goose that laid the golden egg: because performance in alternative asset classes is often attained through inefficiencies in market information. They suggest that too much transparency destroys those inefficiencies in ways that will ultimately penalize the investor.*”

Eighteen months after the release of the PEIGG guidelines, the Centre of Private Equity and Entrepreneurship at the Tuck School of Business at Dartmouth (“Tuck School of Business”) carried out a survey on the PEIGG adoption rates and discovered that 21% of respondents had adopted the guidelines (Venture Capital Journal, 2005). Intriguingly, some GPs appeared to be weakening of their stance, but mainly due to the role of audit. The private equity firms who responded to the survey revealed that they subject to more onerous audits post-Enron and indicated that more than three quarter of the funds would change their valuation policies to receive an unqualified opinion, although there were some accounts that private equity firms were providing investors with a side schedule that contained up-to-date valuations that differed from the financial statements (Venture Capital Journal, 2005). There were others, however, that still preferred to adhere to a conservative philosophy of “under-promising and overdelivering to LPs” i.e., they were of the opinion that when portfolio companies achieve successful exits, this served the needs of all parties vis-à-vis adjusting interim evaluations, particularly for early stage companies. Other reasons for the lack of support included concerns

over increased volatility in reported figures and little interest from limited partners (Venture Capital Journal, 2005).

Other standard setters

Following the PEIGG's move to publish valuation guidelines, the Association Française des Investisseurs pour la Croissance (AFIC), British Private Equity & Venture Capital Association (BVCA) and European Private Equity & Venture Capital Association (EVCA) assembled the IPEV Committee to do the same (IPEV 2015). The consortium of three private equity associations subsequently released the first set of valuation guidelines under the IPEV committee in March 2005. The guidelines were endorsed by thirty regional and national private equity associations in 2006 (Kuan, 2006). Mathonet and Monjanel (2006a) also reported wide acceptance and use of the valuation guidelines amongst the 200 private equity funds they surveyed: all of which belonged to the European Investment Fund's (EIF) portfolio. The authors also reported that adopting the guidelines enabled buyout funds to show gains on their portfolios although the same was not noticed amongst venture capital funds.

A separate academic study which sampled the reporting features of European private equity firms around the time the IPEV guidelines were first released showed some improvement in reporting frequency following the release of the European Private Equity and Venture Capital Association ("EVCA") (now referred to as Invest Europe) reporting guidelines, which were updated in 2005 to bring them in line with the new IPEV valuation principles (Kemmerer and Weidig, 2005). These reporting guidelines were also important as they had the quality of emphasizing the importance of disclosing cash and accounting returns of private equity funds in addition to pertinent qualitative information. For example, there were recommendations to show key multiple to investors such as the distributions to paid-in capital ("DPI"), residual value over paid-in capital ("RVPI"), total value over paid-in ("TVPI") as well as paid-in capital to committed capital, a realisation summary with proceeds, gross IRR and exit method, as well as a portfolio summary with fair value (in accordance with the IPEV guidelines) and Gross IRR (EVCA Reporting Guidelines, 2006).

3.6 Acceptance of ASC Topic 820

In 2007, ASC Topic 820 took effect, meaning that there was no room for GPs to negotiate the use of FVA concepts any longer: they simply had to be adhered to. The implication was that

private equity firms that did not comply with the ontology of how fair value was to be derived under the new fair value measurement standard, would receive a qualified opinion for producing financial statements that were not in accordance with GAAP. The other source of pressure to comply with the FVAF also stemmed from investors such as foundation and pension funds who were also under pressure by their auditors to make sure investments were held at fair value because of changes in audit guidance (CCBJ, 2007).

Following its release of ASC Topic 820, the PEIGG (2007) provided a more resolute view on the importance of FVA:

“Historically, the Private Equity Industry used cost or the value of the latest round of financing as an approximation of fair value; often without considering other facts and circumstances. Such an approach is incompatible with the concept of fair value described above. At each valuation date a manager must decide of fair value for each investment. As further outlined below, these Guidelines provide a consistent and transparent methodology for determining fair value. However, a manager may conclude, after considering the facts and circumstances as outlined below, that the best indication of fair value is provided by cost or the value of the latest round of financing.”

“As the U.S. private equity industry (defined as venture, buyout, mezzanine, and other investments in private companies) has grown and matured, its participants have become increasingly interested in the appropriate reporting of fund values. The interest stems from a number of sources, such as an investor’s desire to measure interim performance, investor’s need for fair value data to report investments in their own financial statements, a manager’s need to report and measure valuations in accordance with fund agreements, and the need to determine the allocation of distributions of fund realizations. This has led to increased scrutiny of portfolio company values and the need for greater consistency of valuation methodologies employed by managers of private equity funds. However, by its very nature private equity is an asset class in which judgment plays a significant role. Accordingly, investors in the same company may have different, but supportable, views on valuation.”

Similar reasons were used by the IPEV Committee (2014) in its letter to the Government Accounting Standards Board (“GASB”) on its exposure draft on fair value measurement and application. In this letter, the IPEV Committee acknowledged that government sponsored pension plans required NAVs to be prepared in accordance with fair valuation measurements to meet their reporting requirements, to their stakeholders, beneficiaries, boards i.e., their institutionalised reporting requirements (IPEV Committee, 2014).

The IPEV Committee (2014) also acknowledged that fair value measurements allowed government investors to make “apples to apples” asset allocation decisions and that it was also a key data point in making interim investment (manager selection) decisions on a comparable basis. It also acknowledged the following:

- Fair Value is often necessary as a basis to make incentive compensation decisions at the LP level.
- Limited Partners need consistent, transparent information to exercise their fiduciary duty. Fair Value provides such information on a comparable basis for monitoring interim performance.
- An arbitrary reporting basis such as cost does not allow comparability.
- Relevant financial reporting standards (GAAP) require LPs to report their investments on a Fair Value basis.

The change in sentiment seemed dramatic considering that that just half a decade prior, GPs were reluctant to prepare and share more information on their portfolios. However, more interestingly, some of the assertions on the merits and uses of FVA appeared to contradict the experiences of the many GPs concerning tension points that manifested with the application of the FVAF, several of which are featured in the next subsection.

3.7 Tension points

One of the key forms of evidence that GPs were tackling with a number of problems following the implementation of the FVAF was in the form of letters written to the FASB, when the latter invited comments on how to improve disclosures about fair value measurements for ASC Topic 820. The discovery of such letters is unsurprising: many private equity firms expressed regret that they did not participate in consultation exercises of the FASB prior to the introduction of

ASC Topic 820 (Private Funds CFO, 2014). As a consequence, when the FASB published an exposure draft of these additional disclosure requirements which included a proposal to provide sensitivity disclosures on level 3 inputs, many wrote in with attempts to educate the FASB on challenges faced following the implementation of ASC Topic 820 to stop further inconvenience to the industry (by August 2009, private equity funds were subject to a few rounds of fair valuation exercises). Snippets of these letters are presented under the sub-headings listed below:

The American Investment Council

The American Investment Council (“AIC”) (formerly known as the Private Equity Council), a US-based trade association for the buyout industry, explained that for each fair valuation, a range of acceptable valuation outcomes existed, and that sensitivity disclosures implied a level of precision a single point estimate which did not exist in practice (Lowenstein, 2009). It explained how private equity funds use multiple methodologies (market and income) to calculate a range of values for an investment and then use analysis and judgment to reconcile multiple outputs to conclude upon a single point estimate (Lowenstein, 2009). The AIC also described how it was difficult to identify simply one or two inputs that could significantly alter single point estimates. It described the complexity of parameters that are simultaneously considered when valuing an investment such as the choice of trailing or forward multiples, appropriateness of comparable selected, progress towards achievement of key development milestones, multiple set of cash flows as well as valuation implications stemming from liquidity and/or covenant issues amongst others (Lowenstein, 2009).

The NVCA

In a similar response, the NVCA, a trade association representing the US venture capital industry, explained that changes in the value of venture capital investments “[did] not slide along a continuum based on assumptions about external factors like interest rates or variations in multiples” but instead rose or fell dramatically depending on events that were critical in determining the commercial feasibility of a product such as if the U.S. Food and Drug Administration (“FDA”) approved trials for a new drug developed by a biotech venture (Heesen, 2009). The NVCA commented that a sensitivity analysis would not be meaningful when applied to venture capital funds (Heesen, 2009).

U.S. Venture Partners

Michael P. Maher (2009), Chief Financial Officer of U.S. Venture Partners, a leading Silicon Valley venture capital firm, also explained to the FASB how venture capital investing typically led to binomial outcomes, making such sensitivity disclosures not very useful for financial statement users. He explained that an investment would either be (i) successfully exited by way of a flotation on a stock exchange, or be exited in a trade sale in exchange for cash or public securities of the acquirer after which an investor will receive a distribution either in cash or in-kind; or (ii) the investment would fail to achieve its business development goals that were the basis for the venture capital funds' investment premise, and the portfolio company would be liquidated with investors receiving nothing more than "cents on the dollar invested" (Maher, 2009). He explained that a successful exit only occurred when an investee company achieved the business goals that served as the basic investment premise (Maher, 2009).

Maher (2009) also explained that for a typical venture capital investment, assumed to be held for as long as six years, a valuation had to be estimated roughly 24 times before an exit is visible. The takeaway from his letter was that valuations at each of these junctures were very arbitrary and that it was more useful for venture investors to get a gist of whether an investee company had reached certain milestones vis-à-vis fair values that failed to explain the fate of these investments. Maher (2009) broke down the pertinent questions that were important to investors:

“Is the portfolio company making acceptable progress toward the product development goals that serve as the investment premise? Is there a likely acceptable market for the company's product? If the answer to either of these questions is "No", then ...realization / exit valuation is moving lower towards zero...Thus, in the most simplistic terms, the most significant alternative input becomes the answer(s) to these two basic questions. It would be difficult to argue that a "No" could be rationalized to a "Yes". However, it is much easier to rationalize that a "Yes" could become a "No".”

He alluded to the standards failing to recognize that in venture capital investing, subjective inputs such as if the company is meeting product development milestones, as opposed to objective ones such as discount factors, multiples or interest rates, are likely to drive the most significant changes to the holding value of an investment (Maher, 2009).

Maher (2009) also raised a second point about how limited partners are the only readers of financial statements of a venture capital fund and explained that most such funds would include a disclosure in their financial statement to: (i) address that the use of different methodologies or assumptions result in a different estimate of fair value as at the measurement date (ii) the carrying values of investments in securities may differ materially from the amounts realised upon the disposition of the investments (iii) the valuation of investments in securities categorized as level 3 require significant judgement due to the absence of quoted markets, inherent lack of liquidity, and the anticipated long-term nature of the investments.

Adam Street Partners

William J. Hupp (2009), Partner and CFO of Adam Street Partners (“Adam Street”), a fund-of-fund and secondary investor, explained how including additional disclosures around the use of level 3 inputs would be disruptive to the normal operations of its direct investing team and believed that this information would be impossible to summarize in a meaningful form. He wrote, *“Trying to determine a range of current value by varying factors over a range and documenting that would take investment partners away from their normal work and thus be disruptive to current operations.”* (Hupp, 2009)

He further explained that sensitivity analysis maybe helpful disclosures for bond or mortgage portfolios and be similar to internal risk analyses that are done in those businesses, but not for private equity funds (Hupp, 2009). He explained that his company did not do such analysis and that if the company didn’t do such analysis then it would unlikely that it would have been meaningful to any of the investors (Hupp, 2009)

Sharing a similar point to Maher (2009), Hupp (2009) also added that investment professionals in venture capital and private equity are focused on the potential future value of the investment and the steps to get to that point, than in the variation of fair valuations at the measurement date. He wrote, *“often this potential exit information is shared in general descriptive qualitative ways with limited partners. This information is in almost all cases proprietary and confidential, and much more meaningful than any derived summary statistical analysis of current value could be.”* (Hupp, 2009)

He also explained that preparation of additional disclosures for fair values would likely cause undue delay to investors, particularly for the year end audited financial statements where this disclosure is audited (Hupp, 2009). Finally, he opined on the proposed disclosure standards from the perspective of a limited partner (Hupp, 2009). He explains that in the role of a limited partner, Adam Street would monitor the expertise of the general partner, their investment plans for the fund and their “*candid views on the prospects for the investments they have made*” (Hupp, 2009). Hupp (2009) also explained that GPs think about the realizable value of their investments under a longer-term investment horizon versus the current value of the investments:

“We participate on valuation and limited partner advisory committees for more than 100 of the funds we invest in. A sensitivity analysis, particularly summarized at the portfolio level, is not something currently provided by the general partners we are invested in, nor have we ever asked for this type of analysis from our general partners. It is unclear to us as limited partners how these new disclosures would be used and we believe they would likely not be use..... our secondary team might find sensitivity information of some limited use, they would still do their own valuation analysis at the portfolio company level if they had the opportunity to purchase a secondary interest. They would also be much more inclined to think like the other investment professionals, not in terms of current value, but in terms of longer term exit values. This makes sense since these are illiquid assets that cannot be easily exited from and if exited from prematurely would likely not bring the value that the investment professional is investing for.”

Hupp (2009) closed his letter by writing how private equity funds disclose the subjectivity of the valuations used and to warn investors that if a ready market existed the differences in the reported numbers versus such quoted numbers would likely be materially different. He added that investors would structure information rights to receive an in-depth understanding of the risks and possible outcomes with regards to the underlying portfolio of investments, which was superior to any information a mathematical range could provide (Hupp, 2009).

Brian Borders

Brian Borders wrote into the FASB on behalf of the NVCA in 2010 and 2011 to suggest that that private companies, which include venture capital funds, should be exempt from sensitivity

disclosure requirements for several reasons. He explained that venture capital funds that opt to provide quantitative disclosures “*however excessive, unreliable or irrelevant*” may provide the optics of having better quality valuations, independent of the substantive quality of the valuation assessments and judgments (Borders, 2010). He also explained that the FASB’s efforts to provide better information would have the opposite effect. He explains that such information would result in new cost and waste across the venture capital industry whilst also risking being misleading (Borders, 2010).

Similar to Hupp (2009), Borders (2010) also explained that limited partners have access to significant amounts of information that fall outside of the financial statements and footnotes (Borders, 2010). He wrote,

“Venture investors demand and receive far more valuable information about the portfolio and the positions that make it up than can be summarized in a footnote in the financial statements. Mandating that incremental disclosure be provided in the audited financial statements will clearly result in additional costs for venture capital funds and their investors.” (Borders, 2010)

Following the many letters from the industry, the FASB clarified that non-public entities did not have to provide the disclosure of other reasonable values for level 3 assets because “because of the characteristics of the users of their financial statements” (Benjamin and Mills, 2013). However, years later, in a feedback letter to proposed changes to disclosure requirements for fair value measurements, David Larsen (2016), Managing Director of Valuation Advisory Services at Duff and Phelps, wrote to the FASB highlighting how private companies were more dissimilar than they were similar. He explained,

“For example, there are a number of late-stage private companies – from the relatively smaller ones to the unicorns of the world - which have minority investors with information needs that might be better served by public company GAAP. These are essentially pre-public investments that are a permanent fixture in a well- developed capital market, and which are much closer to public companies than they are to small closely-held private companies in their characteristics and prospects. Yet the reality is that minority investors in these pre-public companies do not always have the direct

access to management that presumably comes with being an investor in a closely held (and smaller) private company. The needs of these investors could be met with better quality, quantity and timeliness of information (including disclosures), rather than by less information, especially considering the risk of changing conversion rates for their investments that these investors bear as an IPO nears.”(Larsen 2016)

However, he conceded that disclosure requirements to show unrealised gains and losses arising from recurring measurements disaggregated by levels were not meaningful for private equity investments as many used level 3 inputs (Larsen, 2016). He explained that these disclosures had the potential to mislead readers to assume that the quality of the asset and the reliability of the unrealised gain or loss was tied to the inputs used to determine fair value (Larsen, 2016). He also explained that investors in alternative assets looked at the aggregate unrealised gain/loss for each period and did not track or make decisions based on the unrealized gain/loss resulting from the input level used to reach fair value conclusions (Larsen, 2016).

He also stressed that significant “informed judgment” is required to estimate fair value, especially when using level 3 inputs (Larsen, 2016). He argued that although the accounting framework requires a point estimate, in certain circumstances, the reasonable range of values maybe wide and exceed deemed materiality (Larsen, 2016).

3.8 Analysis of the tension points

Prima-facie, the letters sent to the FASB seem innocuous when analysed from the perspective of their response to a new draft disclosure requirement. However, there was arguably a subtext in these letters explaining that precision reporting for private equity was incredibly challenging because of estimation uncertainty (Lowenstein, 2009; Larsen, 2016) as well as the fact that performance data in private equity is not straightforwardly conveyed using hard numbers so introducing sensitivity disclosures does not solve for the issue at hand (Maher, 2009; Borders, 2009; Hupp; 2009). The letters also conveyed that investors were to some degree acknowledging the handicaps of the accounting architecture by requesting for qualitative information that “fell outside of the financial statements and footnotes” (Maher, 2009; Borders, 2009; Hupp; 2009).

The ontology of how fair value is prepared is a big problem for private equity: Barker and Schulte (2017) describe the process of preparing fair values for illiquid investments as one in which the preparer would have to hypothesize the existence of markets and then create a hyperreality in which the preparer would simulate the price at which the asset would transact if the investment was exited on the measurement date. There are two chief issues with this exercise in the context of private equity: (1) it disregards the timing at which the private equity firm actually intends to exit a portfolio company and (2) it does not consider that the price discovery exercises for private equity investments in true exit scenarios is very different from desktop valuation exercises i.e. hypothesizing an exit value under the FVAF is performed under conditions and dynamics that contrast significantly from the “price discovery” processes that GPs use to ascertain “market value” when a private equity investment is truly ready for an exit.

With regards to the first point, Palea (2015) writes that that fair value is (i) a “spot market price” (ii) not an entity-specific measurement, and (iii) the firm’s intention to hold an asset is completely irrelevant. She cites Allen and Carletti’s (2008) role of liquidity in financial crisis to argue that fair values tend to reflect the liquidity available in the market. Palea and Maino (2013) separately explain that the fair valuations of these assets do not reflect the manner in which the cash flows associated with these assets will be realized. A similar point was raised by Blackstone Chairman and CEO Stephen Schwartzman when he said, “What they are trying to ask you to do is value your companies as if you’re going to sell them at the bottom of a recession,” (Financial Times, Gloom hits buy-out gathering, February 3, 2009 cited in Leleux, Swaay & Megally, 2015).

Schwartzman’s comments resonated with those of Vikram Pandit, the Chief Executive Officer of Citibank (“Citi”), in testimony before the United States Congress in February 2009. He explained that the bank marked-to-market but also explained his duty to shareholder: “the duty is if it turns out [the assets] are marked so far below what our lifetime expected credit losses are” – i.e., their net realisable value on a discounted cash flow basis – “I can’t sell [them].” (Wallison, 2009).

With regards to the second point on how the price discovery at an exit compares with a desktop valuation exercise, research by Cazalaa, Hayes and Morgan (2019) points to risks of desktop valuations failing to capture the exit premiums GPs offer investors. Cazalaa, Hayes and

Morgan (2019) report findings from interviews with more than 30 decision makers working in private equity funds. The authors explain that the preparation for an exit of a private equity investment starts with a readiness scan 18 months prior to approaching the market. Cazalaa, Hayes and Morgan (2019) explain that the runway of one to two years allows management and investors time to craft a powerful story, assemble the message and tailor the messaging to the audience. The trio also explain that understanding the buyer profile is important because it influences the asset's storyline, which would be very different depending on whether the target is an institutional investor buying shares on the stock exchange vis-à-vis a fellow private equity player intending on purchasing the same asset. Cazalaa, Hayes and Morgan (2019) also state that it is necessary to tailor an equity story to the level of sophistication and awareness of the buyer universe, educating them where necessary. Whether a fund is selling to the most sophisticated buyer or to one who is less so, the way the fund crafts an equity story ultimately shape the way buyers think about the opportunity and in doing so, maximises the economic value of the investment (Cazalaa, Hayes and Morgan, 2019).

3.9 GP interference

Although GPs struggle with the ontology of how fair values are to be prepared, these actors also add to the roster of problems associated with the FVAF because they also tend to exploit the accounting architecture when deemed favourable. In reference to a study by Jenkinson, Sousa and Stucke (2013), the authors found that fund valuations are conservative over the life of a fund and tend to be smoothed relative to movements in public markets. However, they also found that valuations of private equity funds have a tendency of being inflated during fundraising periods compared to other periods in the life of the fund. Jenkinson, Sousa and Stucke (2013) reached this conclusion following an analysis of quarterly valuations and cash flows for the entire history of 761 fund investments made by CalPERS. The information used by Jenkinson, Sousa and Stucke dates to 1990 and represents venture capital, buyout and other variants of private equity funds that have collectively raised close to US\$1 trillion. Besides the research of Jenkinson, Sousa and Stucke (2013), Cumming and Waltz (2010) have also found strong links between GPs inflating unrealized IRRs in different contexts such as when information asymmetries are high and where accounting and legal environments are less restrictive (Cumming and Walz, 2010).

It is important to piece apart the implications of the findings of Jenkinson, Sousa and Stucke (2013) as well as Cumming and Walz (2010). Firstly, GP tendencies to smooth returns has a consequence if an investor is trying to measure private equity's risk and correlation with other asset classes using fair value data. Smoothed data leads to understating private equity's standard deviation of returns and correlation with other asset classes (Tuck School of Business, 2003; Korteweg and Sorensen, 2011; Lerner, 2022). The problem is also more exacerbated in certain subcategories of private equity such as buyout funds vis-à-vis others such as venture funds (Reyes, 2012). Fair values for venture funds tend to have a self-correcting mechanisms since there are multiple arms-length transactions over the life of an investment (Reyes, 2012). However, for buyout investments, investors typically just see one transaction and only one real reference point to validate the valuation (Reyes, 2012). Lerner (2022) provides little comfort on solutions in the context of fixing the effects of smoothing,

“The academic literature typically makes adjustments to the valuations of returns on a quarterly basis and tries to more accurately reflect what was going on in the portfolio. The problem is that the estimates of risk and correlation (with public markets) are very sensitive based on how you go about this process. Some papers say beta of private equity is about one and others say it is as large as three. You see everything in between. When you have wildly different estimates of risk, the risk-adjusted returns are therefore highly variable as well. There is also the complication of whether you make an adjustment for liquidity. These aren't easy investments to buy and sell. The literature shows that if you look across the NASDAQ, the stocks that trade less frequently offer an additional return, even if you adjust for their other characteristics. The truth is that we don't really know yet how to estimate return and risk for private markets. There is a lot of research on this question but it seems like we are at the same stage that we were with public markets back in the mid-1960s, when Sharpe, Lintner, and their colleagues published the CAPM. The notion of beta was out there, but it hadn't yet been put to work by mutual funds, hedge funds, and data services. It was an academic idea and the industry hadn't worked out how to put it into practice. A lot of tools developed by academics in recent years will be useful in answering this question about risk and return, but they aren't in a form yet where they are user-friendly for SWFs and other investors to put into practice”

Although smoothing is problematic to those trying to fit private equity into modern portfolio models, there are intriguingly others that find this feature of private equity desirable because it has the effect of tuning out market volatility from the private equity story of “invest-create value-exit”, which also has the effect of suppressing fear amongst private equity investors in times of market turbulence (Powell, 2020). To this end, this is believed to be the reason why GPs did not write down their valuations as much as they needed to during the GFC (Davies, 2009).

Snippets of the comments section on an article by Powell (2020) on the topic of smoothing being a feature and not a “bug” further explain why this is important:

Comment 1: “...having more — and more frequent — information just gives investment allocators more opportunities to let their cognitive biases make bad decisions for them. And that’s true of everyone because we all have the same psychology.”[sic] (Powell, 2020)

Comment 2: “If having more information means you trade at the wrong times means that’s a problem with you, not the public markets. You have the option to tune out high frequency information. Better though, is to incorporate new info into your “moving average” of your opinion, where the window is your horizon. THAT value will be less volatile than the stock price, just like PE.” [Sic] (Powell, 2020)

Comment 3: “My view is that when markets go bearish in an unreasonable way especially during the massive panic attacks, companies held privately by PE funds can apply the logic of the panic and not devalue those companies only because the entire market is scared. We saw that during the financial crisis in 2008 when publics were down and everyone started selling their interests in LP structures at massive discounts even though in reality the vast majority of those companies were absolutely healthy. So in theory there is some sort of protection in valuations against the craziness of the market.” [sic] (Powell, 2020)

In the context of exaggerated fair valuations around fundraising periods, the possibility that private equity fair valuations are being managed makes relying entirely on track record

information concerning, especially if investors are not well-versed in the industries the GP is investing in. It is useful to note that there are some accounts of investors requiring to see cash returns before committing to funds (INSEAD Knowledge, 2013, Barber and Yasuda, 2017). In an interview with business school INSEAD, Jim Leech, who was at the time the CEO of Ontario Teachers' Pension Plan, a well-known Canadian private equity investor who at the time of the quote was making headlines for disintermediating and competing with other GPs, described how "*stereotypical private equity funds would have to show an exit a disposition in order to have the returns to be able to raise the next fund*" (INSEAD Knowledge, 2013).

3.10 Inherent problems

Besides the foregoing, there are also pitfalls when interpreting NAVs reported by private equity funds at face value. For investors in private equity, the NAV of a fund is often used as a practical expedient for fair value, without a need for adjustment, in the financial statements of investors (FASB, 2011). Although the largest component of the NAV of a private equity fund is the fair value of the underlying investments, Invest Europe (2019) explains that the NAV for private equity is not always indicative of the progress of the investee companies between the date of investment and exit. Invest Europe (2019) explains,

"A change in the unrealized gains and losses in private equity and venture capital investing, as expressed by changes in the interim NAV of a private equity or venture capital fund, is not the same as a change in the listed price of a share: a change in an interim NAV could for instance simply reflect an injection of new capital to acquire new plant or machinery."

A similar point is made by Korteweg (2018), who explains that venture capital investments are very often held on the books at the post-money valuation following new financing rounds. Korteweg (2018) also explains how interim NAVs are presented net of carried interest. He argues that such a figure cannot be used to "compare GP skill" because carried interest is only payable when a GP is successful, and this has the effect of lowering the NAV (Berk and Green 2004 cited in Korteweg 2018).

Another misleading feature about the NAV in the early parts of a fund's life is that it only represents the "performance" of the capital that has been drawn down from investors. It does not convey how the remainder of the capital will be deployed or the exit strategies that are

underway (Mathonet and Monjanel, 2006b). As such, NAV information may only be meaningful after a significant amount of capital has been deployed. Until then, such information can be misleading and may have to be marginalized or used with caution (Mathonet and Monjanel, 2006b).

Measuring fund performance before valuation creation activities are underway and using this information to compare across similar vintage year funds also has its own set of risks. Investment consultant Cambridge Associates, which collects and publishes benchmark statistics for private equity funds, warns that most private equity funds take at least six years to settle into their final quartile ranking, and before this settling they typically rank in 2-3 other quartiles (Cambridge Associates, 2020). Their research suggest that fund or benchmark performance metrics from more recent vintage years may be less meaningful (Cambridge Associates, 2020).

It is useful to acknowledge that part of the problem with fair valuation estimates measured too early in the fund cycle for certain subcategories of private equity such as venture capital maybe rooted in the fact that certain companies are valued at periods of “high and accelerating growth” (Zider, 1998). Zider (1998) describes how in the context of venture capital, when investing in the adolescent stage of a company, it becomes difficult to separate the winners from the losers because the growth rates “look strikingly similar”.

3.11 Stale information

Stale information is a problem with private equity financial reporting. Private equity funds send quarterly NAV statements to LPs between 45 to 60 days after quarter-end (ILPA, 2016, Kemmerer and Weidig, 2005). A long period is negotiated to publish financial reports because the flow of information between portfolio companies, private equity firms and private equity firm’s investors are not necessarily efficient and takes on average four months (Kemmerer and Weidig, 2005). Once the private equity firm receives this information, it uses inputs from various sources including intelligence databases such as Bloomberg or Capital IQ to prepare fair valuations.

The year-end financial statements take longer to publish: Audited financial statements are sent to investors 90 to 120 days after the financial year end of the fund (ILPA, 2016, Kemmerer and Weidig, 2005) because of the various agents involved in validating the valuations prepared by

the private equity firm (Kemmerer and Weidig, 2005). External auditors take on the role of establishing the veracity of private equity fair valuations used in the annual financial statements. The auditors will review the valuation memos used to produce these figures and embark on a process of collecting evidence to satisfy themselves that these numbers are free from material misstatements.

The delay in fair value reporting for private equity has consequences. During the GFC, many retirement portfolios, investing in private equity as part of an asset allocation strategy, became victim to technical stress because steep drops in the valuations of listed securities dragged down a portfolio's overall asset values, leaving the private equity portions overrepresented in their portfolios (Akers and Nicum, 2019). Some pension funds with strict asset allocation guidelines, found themselves overweight to private equity and sold their private equity investments on the secondary market in an environment of deep discounting (Bloomberg News, 2011; The Preqin Private Equity Secondaries Review, 2010).

One of the many reasons why institutional investors found themselves overweight to private equity, is postulated to be that the write-downs on private equity assets were slow relative to listed assets, partly because valuation reports are prepared and sent to investors several weeks following the measurement date (Hegi and Nutti, 2011). In an environment of falling valuations, private equity valuations appeared to hold better than public equity valuations because of a mismatch in the measurement dates (Hegi and Nutti, 2011).

3.12 Increased complexity in fund administration

Wall (2009), a senior product executive for JP Morgan Private Equity Fund Services, explains how stale and model-based valuations has increased complexity in fund administration. His article titled "Hard-to-Value Assets in Uncertain Times: Fair Value Reporting Best Practice for Limited Partners" describes how in stable markets most fund managers already used a strategy of rolling these numbers forward for any capital calls and distributions between the fund's reporting date and their reporting date (the "roll forward value") (Wall, 2009). However, he argued that during the GFC, the 90 days wait was too long a time for investors to ascertain the fate of their private equity portfolios and this led to extraordinary measures of carrying out valuation inspections (Wall, 2009). He explains:

“Most [clients] started a dialogue with each of their fund managers throughout the fourth quarter of 2008 and into the first quarter of 2009. They looked at each fund on a case-by-case basis, and assessed what each fund manager was doing in the current economic climate to retain value, as well as to measure the value of their portfolio in the interim period (Wall, 2009). Many LPs moved away from roll forward values, accounting for some market effect best qualified through discussions with their fund managers (Wall, 2009). For clients providing adjusted values, we facilitated tracking their updated accounting and performance reporting. Among the ideas that were also deliberated but eventually not adopted were taking a valuation reserve and engaging their own valuers.”

He also explained how some LPs were outsourcing the administration of monitoring their private equity portfolios to better understand the valuations they have received (Wall, 2009). The same paper also states that LPs were deviating from the reported NAV of private equity funds either because those they had better data to perform their own and independent valuation on a direct holding they co-invested alongside the fund (Wall, 2009).

Wall’s (2009) observations are congruent with the findings of Mathonet and Monjanel’s (2006b) case study on the European Investment Fund (EIF), which also shows an inordinate amount of effort on the LPs part to deal with the complexity of fund NAVs. Mathonet and Monjanel (2006b) analyse a survey on the 217 funds in the EIF’s portfolio after it requested that investee funds comply with the IPEV guidelines that were released in March 2005.

Among the highlights of Mathonet and Monjanel’s (2006b) paper was that the EIF would review the valuation guidelines applied by the underlying fund with the objective to assess if the fund followed IFRS-compliance guidelines and also did spot checks on a few portfolio companies. To account for the time-lag in fund NAVs, the EIF would adjust the fund NAV for capital calls and distributions that have been made between the quarterly reporting date and the date of EIF’s own reporting. Where there was uncertainty with an underlying fund’s reported NAV being faithful to the IPEV guidelines, the EIF would account for these funds at cost minus impairment. The amount of impairment is typically estimated by way of a proprietary model - a two factor impairment matrix based on the operational and performance grade assigned to the fund.

The EIF would also review the underlying fund's operational and performance grade on an annual basis (Mathonet and Monjanel, 2006b). This exercised would be informed by monitoring activities such as notes from "flash reviews" of regular financial reporting, monitoring visits, significant information with potential valuation impact and subsequent events (Mathonet and Monjanel, 2006b).

Mathonet and Monjanel (2006b) argue that such validation reviews make sense when relevant and cost effective. However, they caveat that a bottom-up analysis on each portfolio company creates a high workload – in the case of EIF, it had more than 2000 underlying portfolio companies as of March 2006. Mathonet and Monjanel (2006b) also warn that such look-through analysis is of limited use and is conceptually doubtful, particularly for young venture capital funds.

3.13 Peripheralizing the use of fair value estimates

Investors are cautioned about the pitfalls of using fair value data in certain areas. The ILPA Principles 3.0 is published by the ILPA, an organization that positions itself as advancing the interests of LPs and their beneficiaries through best-in-class education, research, advocacy, and events (ILPA, 2021). The ILPA recommends avoiding the use of fund "NAV" when calculating fees (ILPA Principles 3.0, 2019). As a workaround, management fee can be charged as a percentage of capital commitment or net invested capital, therefore, avoiding the possibility that a GP maybe earning fees on erroneous or possibly manipulated fair valuations. The ILPA also recommends using the European carried interest model, however, if American carried interest models are used, then it recommends avoiding the use of fair values held higher than cost when calculating interim clawbacks on carried interest (ILPA Principles 3.0, 2019).

To expound on the latter point, it is believed that Americans have generally accepted a more GP-friendly waterfall, whereby carried interest accrues on a deal-by-deal basis (i.e., the American carried interest model) vis-à-vis European funds, which calculate carry on a whole-fund basis (i.e., the European carried interest model) (Lutgen and Silveira, 2018). By virtue of the way the American style waterfall is structured, a GP receives carry on a good deal but is not penalized for deals that fail to return capital plus preferred return (Leleux, Swaay & Megally, 2015). Notwithstanding, some investors do structure interim clawbacks on possible overpayment in American waterfalls (Lutgen and Silveira, 2018). These interim clawbacks

have multiple test dates, from the end of the investment period till right before the liquidation date of the fund (Lutgen and Silveira, 2018). In the context of carried interest models with interim clawbacks, the ILPA Principles 3.0 (2019) recommends that all unrealized investments should be valued at the lower of cost or market.

In secondary market transactions, the NAV that is prepared by the GP (the “fund NAV”) is used as reference point but not as a pricing basis. It is important to understand the difference. Secondary buyers typically construct their own pricing models to purchase secondaries than rely on fund NAVs (Hupp, 2009; Secondaries Investor, 2017; Scarpa et al., 2015). For instance, Daniel Dupont, the Managing Director of Northleaf Capital Partners, indicates that his company prices secondaries following a rigorous bottom-up analysis which involves building cashflow projections by company under various scenarios (Secondaries Investor, 2017). However, he also indicates that his company assesses the managers capabilities and considers the seller’s expectations and investment returns (Secondaries Investor, 2017). Thus, whilst the fund NAV may be referred to as a basis for negotiating the sale and purchase of a secondary transaction, it is simply a reference point.

The same messages around fund NAV’s being subordinated to “reference points” emerges in a roundtable discussion held by Private Equity International (“PEI”) in May 2015 (Scarpa et al., 2015). PEI asks a panellist of secondary investors: “*All the easy money’s already been made in secondaries, according to a Financial Times column last month. Fighting words or bang-on?*” The background to PEI’s question is that the GFC had led to a number of distressed sales leading to secondary funds acquiring private equity stakes at deep discounts (Stevenson, 2015; Scarpa et al. 2015).

In response to this question, Rudy Scarpa, Partner at Pantheon opined,

“There are still inefficiencies in the secondary market. We need to remember that we’re buying limited partnership interests in private funds that are in turn invested in private companies. While eventually general partners sell those companies at their market value to generate good returns, a portfolio company’s current net asset value (NAV) doesn’t always equate to current fair market value and that translates into market inefficiencies.”

As long as inefficiencies persist, there are opportunities for secondary buyers to generate attractive returns” (Scarpa et. al. 2015)

PEI probes further to ask *“But what about today’s full pricing environment? Surely that’s a challenge”* (Scarpa et al., 2015), PEI asks the question about buying secondaries at a price that is equal to the fund NAV prepared by the private equity firm. One of the panellists, Adam Howarth, Partner at Partners Group, clarifies that quoting secondary transactions as having been completed at a premium or discount to NAV is merely an optical presentation. He says,

“I still think the term ‘full price’ is irrelevant because it goes down to the cash flows. And if I buy something at what seemed a premium to the reference date, I can generate cash flows over a whole period – which may be three or four years – that are well in excess of what that cash purchase price was. So we are not as concerned about what the price is vis-a-vis the NAV because that’s so fungible – is it reference date, is it closing date? Historically it’s always been around that reference date NAV that people have benchmarked to, but you can kind of use anything you want to.” (Scarpa et al., 2015)

The failure of private equity fair valuations to meet the litmus test to use as the basis of pricing of secondary portfolios is also explained by Palea and Maino (2013). Palea and Maino (2013) select a portfolio of securities that trade on stock exchange, and they ‘treat’ the portfolio as if it is privately held. The researchers value each of the companies according to different valuation techniques namely, market multiples, transaction multiples and an option approach (akin to level 2 and level 3 valuations) and compare the results of the fair valuation exercise to the securities actual quoted prices at the same reporting date. The results of Palea and Maino’s (2013) research show that the valuation of private equities using level 2 and level 3 measurement techniques is markedly different from the quoted prices of those same exact same securities. Palea and Maino (2013) conclude that market-based valuation techniques fail to provide representationally faithful fair values and entity-specific adjustments are required to provide robustness to these figures.

Palea and Maino (2013) also explain that investors are likely to reduce the reliance on fair value measurements in their equity-pricing decisions because they are aware of estimation errors. According to the authors, accounting amounts that are less reliable are assigned a higher

cost of capital and are valued less than a more reliable number (Diamond and Verrecchia, 1991 cited in Palea and Maino, 2013), which in the secondary market can also take the form of heavy discounting (Leleux, Swaay & Megally, 2015). Their findings are consistent with the studies of Bagna, Martino and Rossi (2014) as well as Magnan, Menini and Parbonetti (2015) that uncertainty in level 3 valuations leads to higher cost of capital. Bagna, Martino and Rossi (2013) studied the extent as to which European banks market prices reflect the balance sheet value of financial instruments estimated at fair value. Their research confirmed that for European banks, level 3 net assets were priced at a discount. Magnan, Menini, and Parbonetti (2014) also found that the greater the proportion of securities measured at level 3, the greater the dispersion in analyst forecasts.

3.14 Summary

Although the FVAF has been heralded as a tool that could reduce information asymmetry between the GP and the LPs, an investor requires a nuanced understanding of private equity to administer and interpret fair values for the asset class versus the expertise that would be demanded of the same investor if s/he was reading quoted prices of listed equities off a trading screen. Private equity investors need to carry out contextual analysis (e.g., *is this investment ready for an exit or are there various value creation activities still underway?*), question if fair values are potentially biased and are expected to have the resources to adjust for time decay and account for the level of estimation uncertainty in these numbers. For the most part, the private equity industry appears to acknowledge these handicaps of the FVAF: certain investors and industry groups acknowledge that these numbers should be peripheralized in certain uses such as pricing secondary transactions (Scarpa et al., 2015) or paying fees or carried interest (ILPA Principles 3.0, 2019).

In taking a purely dogmatic view, it would be easy to write-off the FVAF as somewhat of a failure with potential economic consequences to the extent that these numbers are heavily relied upon for uses such as calibrating portfolio exposures, pricing limited partnership interests, structuring management fees and carried interest payments. However, the FVAF continues to be prepared for use in periodic financial reports. Section C reviews the institutional framework around fair values to understand reasons for this phenomenon.

Section C

The objective of this section is to identify the actors involved in private equity reporting practices and the role they play in stabilizing the institutionalisation of the extant fair value accounting techniques in financial reporting for private equity. It also describes the challenges faced by certain actors such as auditors in performing their duties such as ascertaining the reasonableness of hard-to-value assets. It also investigates how the FVAF has transformed the GP's relationship with these institutional actors.

3.15 Regulatory oversight

The private equity industry in the US has been regulated under the Dodd-Frank Act since 2010 (Wong, Bal & Carrillo, 2010). The US introduced the Dodd-Frank Act with the intention of improving regulatory oversight of securities and capital markets activities by further protecting investors, expanding the SEC's regulatory authority, as well as expanding the application and enforcement of existing provisions of the federal securities laws (Wong, Bal & Carrillo, 2010). The Dodd-Frank Act also targeted private equity by requiring registration of US based private equity firms that manage more than US\$150 million assets under management. This essentially meant that as registered advisers, private equity firms were subject to reporting and recordkeeping requirements as well as periodic examination by the SEC (Wong, Bal & Carrillo, 2010).

The SEC was granted formal oversight of the private equity industry in 2012 (Lattman, 2012). There were two reasons why the SEC began to regulate the industry. Firstly, investments in private equity had reached trillions of US dollars, much of it in the US (Ceresney, 2016). Secondly, it was difficult for investors in private equity to withdraw their capital in the event issues arise. Although an argument can be made that these investors are accredited, the regulators understood that retail investors were indirectly exposed to the asset class by way of pension plans that invest retirement savings into private equity funds (Ceresney, 2016). Similarly, endowments, which are used to fund scholarships, were also heavily investing in private equity (Ceresney, 2016). The SEC's chief concern was that if a GP committed fraud, the underlying victims included the mom-and-pop investor that are not able to protect themselves and that even experienced investors can be defrauded due to the lack of transparency into the various fees, expenses, and practices of private equity fund managers (Ceresney, 2016).

Of the various areas of misconduct that is examined by the SEC is the manipulation of valuations and the misrepresentation of performance. Bowden (2014), who was then the appointed director of the Office of Compliance Inspections and Examinations (“OCIE”) of the SEC, voiced at PEI’s Private Fund Compliance Forum in 2014, that academic studies supported the concern that advisers inflate valuations during periods of fundraising. He explained that valuations were a clear signal to investors about the performance of an adviser’s portfolio under management, which he considered to be the most relevant to an investor considering investing in a current offering (Bowden, 2014). He also said that some parties were mistaken that the SEC’s intent was to challenge the valuations and emphasized that the SEC was concerned with instances where the adviser’s valuation was clearly erroneous. He provided some examples of what the examiners were looking out for such as cherry-picking comparable transactions or adding back inappropriate items to EBITDA, changing the valuation methodology from period to period without additional disclosures and changing from using trailing comparables to using forward comparables to increase the valuation of struggling investments (Bowden, 2014).

The SEC not been passive in examining and taking enforcement action against errant fund managers since its formal oversight of the industry took effect. Between 2010 and 2012, the SEC had brought more than 100 enforcement actions against alternative investment fund managers on matters of misconduct, which included misstated valuation and performance (Puca, 2013). Bruce Karpati, former head of the Enforcement Division’s Asset Management Unit (AMU) also warned in a private equity forum in 2013 that it was not unreasonable to think that the number of cases involving private equity would increase (Puca, 2013). More recently in June 2020, the OCIE, released a risk alert that made mention that private equity firms were valuing underlying investments in a manner not consistent with their disclosures resulting in overcharging of fees and carried interest (SEC, 2020).

One of the more notable incidents of valuation manipulation highlighted by the SEC was Oppenheimer Asset Management Inc., an adviser registered with the SEC that misled investors about the valuation and performance of a private equity fund-of-fund vehicle (SEC, 2013). The SEC wrote,

“An SEC investigation found that Oppenheimer Asset Management (OAM) and Oppenheimer Alternative Investment Management disseminated misleading quarterly reports and marketing materials stating that the fund’s holdings of other private equity funds were valued “based on the underlying managers’ estimated values.” However, the portfolio manager of the Oppenheimer fund actually valued the fund’s largest investment at a significant mark-up to the underlying manager’s estimated value, a change that made the fund’s performance appear significantly better as measured by its internal rate of return.” (SEC, 2013)

3.16 Audit exercises

The scope of work for an auditor includes assessing the reasonableness of single point approximation of hard-to-value investments and in the case of clients such as private equity funds where all the assets are privately held, a large part of an auditor’s work goes into reviewing these numbers. Auditors face a two-fold problem. First and foremost, even though fair valuation exercises are intended to be principle-based and even though auditors need to assess the representational faithfulness of such numbers (Erb and Pelger, 2015), significant guidance is still required to determine if a valuation is fair (Benston, Brownwich, and Wagenhofer, 2006). Secondly, auditors have little training in valuations (Martin, Rich, & Wilks, 2006 cited in Okamoto, 2014) and are not able to get comfortable around the lack of verifiable and corroborative evidence and the degree of difficulty in assessing the reasonableness of assumptions and benchmarks (Glover, Taylor, and Wu, 2016). Therefore, auditors have the burden of ascertaining “reasonableness” to reduce the risk of material misstatements (Brown-Librurd, 2021). The crux of the matter, however, is that estimation uncertainty (and therefore the reasonable range of values) exceeds materiality (Christensen, Glover and Wood, 2013; Larsen, 2016).

Faced with these challenges, certain private equity fund managers have found that auditors have resorted to more documentation and unnecessary testing of valuation inputs that are auditable but, ironically, not material in determining the output value (Franklin, 2017). For example, the NVCA cited the example of auditors focusing on whether the correct discount rate has been used although the future cash flow has the most significant impact on the end valuation (Franklin, 2017). The NVCA also outlined several matters such as instances when estimation uncertainty out-weighed materiality and that the additional testing that auditors were

performing simply did not result in reduced estimation uncertainty (Franklin, 2017). The NVCA also opined that such practices were wasteful and self-protective (Franklin, 2017).

Besides additional testing, a study by Glover, Taylor and Wu (2016) has shown that auditors have begun to use (i) in-house valuation specialists employed by the audit firm, (ii) third party valuation specialists engaged by the audit firms and (iii) third-party pricing services, to cope with valuing level 2 and level 3 valuations.

3.17 Independent valuations

It is useful to note that whilst independent valuers aid with audits, the work of such agents are not enthusiastically embraced by private equity industry practitioners (Private Fund CFO, 2014). The discord stems in part from the industry's belief that professional valuers are not able to comprehend their businesses (Private Funds CFO, 2014; Franklin 2015).

To explain this conflict, the NVCA took the opportunity to reply to the PCAOB's consultation paper titled "Auditor's Use of the Work of Specialists", stating that valuation specialists were technically proficient but lacked the venture specific background needed to value the assets (Franklin, 2015). In this letter, the NVCA expressed concern that the auditors favoured the specialist's valuation procedures over the venture capital fund's even though the models used by the specialists produce valuations were no more accurate than the valuations prepared by the private equity firm (Franklin, 2015).

Indeed, it has become commonplace for valuation specialists to use technical models such as the option-pricing model ("OPM"), which is based on the Black-Scholes model, to allocate equity value between ordinary and preferred shares, the latter of which may have certain rights such as liquidation preferences over ordinary shareholders (Kiepura, 2020; Mesner, n.d.). The reason why this model is used widely in valuation exercises for the private equity industry is because many venture capital and private equity investments are structured by way of preference shares with more economic privileges vis-à-vis other classes of shares (Kiepura, 2020). Although the OPM is claimed as the most appropriate method when specific future liquidity events are difficult to forecast (Section 6.41 of the AICPA's Accounting and Valuation Guide for Valuation of Privately- Held-Company Equity Securities issued in 2013 cited in Mesner, n.d.), such as for companies with longer liquidity event timelines and option-

like payoffs, the vulnerability in the valuation technique stems from the estimation errors that cannot be removed when selecting an appropriate volatility and time to exit.

On the whole, professional valuers are well aware that their work does not reduce estimation uncertainty. The following are examples of disclaimers used in external valuation reports:

- “Fair valuation is not a precise science and the conclusions arrived at in many cases will, of necessity, be subjective and dependent on the exercise of individual judgment. There is no indisputable single value.”
- “While we normally express our assessment as a range of values, we hereby provide an opinion on a single value on the basis that the auditors require such information. We have provided an assessment of this single value based on an analysis of the information available to us and within the scope of our engagement.”
- “The knowledge, negotiation power and motivations of the buyers and sellers as well as control factors are likely to affect the actual price of such transaction, which can be higher or lower than what is stipulated in this report”

Excessive Costs

Over time, what can be interpreted as “fair valuation theatrics” have contributed to higher costs. To quote an limited partner interviewed by Private Funds CFO (2014), “*I’m hearing from some GPs that they’ve spent seven figures on valuation work. Well, those costs are passed down. That hurts our return*”. The NVCA (2015) also discovered a contradiction in that its members have found their audit fees and staff time requirements double or even triple to audit the same funds under the same fair value accounting rules. They surmise that if the rules in itself are not the driver to the increase in staff time requirements or audit fees, then something else had changed. In an attempt to explain the phenomena, the NVCA (2015) writes, “*One explanation for this trend was the fact that the Public Company Accounting Oversight Board (PCAOB), the federal regulator of the audit profession, had found deficiencies in unrelated fair value audits by a few audit firms and the auditors were responding with more intensive audit procedures.*” To provide some context, in 2002, the US introduced SOX, a federal law that was primarily aimed at protecting shareholders, employees and the public from accounting

errors and fraudulent financial practices. This led to the supervision of the auditing profession by the PCAOB, which was established by the United States Congress, and led to the tightening of audit processes of both private and public companies. Many auditors also fear litigation exposure in litigious environments such as the US (Botosan, Carrizosa and Huffman, 2011).

This observation on increasing costs and risks for auditors, in particular, is consistent with academic studies that seek to understand if valuing hard-to-value investments lead to higher audit fees. A study by Ettredge, Xu and Yi (2014) also show a positive association between audit fees and the proportion of total assets that are fair valued using Level 3 inputs is greater than its positive association with the proportion of assets that are fair-valued using Level 1 and Level 2 inputs. The authors study was based on publicly traded bank holding company from 2008 to 2011.

Alexeeyva and Mejia-Likosova (2016) also study the relationship between fair valuation measurement and audit fees in the banking sector. Their sample covered 24 European countries over the period of 2008 to 2013. Their study uncovered that the total proportion of fair value assets does not affect audit fees. However, there is a positive relationship between high uncertainty fair value assets (Level 3) and audit fees. The authors research also showed that a country's institutional setting was also positively related to the effort spent on evaluating high-uncertainty fair value inputs, suggesting that strong governance settings lead to higher costs associated with audit checks. The authors findings are consistent with the prediction that auditors expend more effort in more regulated settings due risks of litigation (Botosan, Carrizosa and Huffman, 2011).

3.18 Conclusion

Section A describes the rise of FVA whilst Section B provides a narrative as to the factors that led to the implementation of FVA in the private equity industry. Section B also describes a slew of operational challenges involved in preparing, processing, administering and interpreting fair values for private equity. It also, rather interestingly, unravels a matrix of institutional actors that have rallied together to promote the support and institutionalization of the FVAF for use in investor reporting in spite of the operational challenges that have manifested following its implementation. This finding suggests that the FVAF for private equity is not simply an accounting product – it is an institutional phenomenon that relies on

various institutional actors to act-in-concert to make it ‘work’. The identity of the institutional actors and how they are connected are listed in Table 1 and charted in Figure 1.

At a glance, it can be appreciated that private equity reporting practices are set against an institutional backdrop where the actions and reactions of the various actors has created support for the FVAF. In this regard, institutional theorists Mele, Pels and Polese (2010) suggest that systems theory can be valuable at investigating the workings of the entire system as well as the specific, reductionist view of the specific components and their traits. The following subsections identify the specific components of the system (i.e., the actors) as reflected in Figure 1, their persuasions and explains how they come together (as a system) to create an ‘institutional’ product.

Politicians, lawmakers and accounting standard setters

The manifestation of FVAF as an institutional phenomenon can be traced to an ideology that capital markets could be unified: the race to financialize and integrate capital markets was on the agendas of several bodies such as the European Union and the G20 in the early 2000s. These groups were responsible for creating strong political support for a convergence of accounting standards and construction of a common yardstick to measure economic value. The US hegemony and the desire to tap into America’s burgeoning capital markets, however, also meant that agents such as the SEC, which has the authority to set and enforce the use of accounting standards for listed and regulated entities in the US, and the FASB, which produces US GAAP, were empowered to shape global financial standards.

Between the SEC and the FASB, the former was clearly the lynchpin behind the introduction of the FVAF. In the early 2000s, the missteps of listed companies such as Enron and Global Crossing created significant pressure for the SEC to thwart incidents at securities fraud and so it lobbied for a framework to guide valuation activities. It was also vehemently behind a one-size-fits-all accounting framework and, because it had powers to set and enforce the use of certain accounting standards for a large part of corporate America, was able to influence the introduction of the FVAF by the FASB. The FASB was, in turn, empowered by the political support to harmonize global accounting standards to push for the IASB’s adoption of the FVAF. By acting-in-concert and by virtue of the duopoly of the FASB and IASB, all

investment companies, including private equity funds, had to comply with this new accounting architecture reflected in US GAAP and IFRS, respectively.

Support actors

Contemporaneous with the initial political activity supporting the rise of FVA and related techniques, the private equity industry began to see various bodies coalesce to regularize reporting standards and advance the use of FVA concepts for private equity in the early 2000s. Such include the CFA Institute, PEIGG and IPEV, all which released valuation guidelines to help the industry achieve consistency and transparency in financial reporting. At the material time, many GPs would have already been facing systemic discrimination for not adopting FVA concepts because the asset class was raising capital primarily from pension funds many of which required preparation in accordance with US GAAP (Easton, Larocque and Stevens, 2019). Such investors were under pressure by their own auditors to force the application of fair valuation techniques because of changes in audit guidance (CCBJ, 2007). The need to improve financial reporting was further exemplified following poor exit activity at around the time at the DotCom bust. With no exits to show, investors were concerned that private equity's legacy valuation practice of holding investments at cost or latest equity raise was overstating the holding value of the investments in the aftermath of the DotCom bust (CCBJ, 2007).

There were, however, GPs that resisted caving into demands to comply with FVA simply because no active market for private equities existed and assigning estimates to these forms of investments risked being arbitrary. The NVCA, for one, was critical of how such techniques could be applied to early-stage ventures. Notwithstanding the foregoing, the re-architecture of the accounting framework by the FASB and IASB in the following years, created coercive pressure to adopt FVA concepts and increased the relevance and use of the valuation standards set by the PEIGG and the IPEV Committee. A relatively recent post-implementation review of IFRS 13 by the IASB also makes mention that respondents are performing fair value measurements of unquoted equities are using the guidance set by the IPEV Committee (IFRS, 2018).

Although the PEIGG and IPEV Committees introduced valuation principles that GPs could use to value their investments, there remained inherent risks that errant GPs could manage and manipulate fair value estimates for their benefit (Jenkinson, Sousa and Stucke, 2013; Barber

and Yasuda, 2017). The fair valuation conundrum for private equity was exacerbated by the fact that investors also faced inordinate challenges in the administration and interpretation of financial reporting for private equity. To name a few, (i) fair values for private equity investments risk being stale as such data is sent to investors weeks after the reporting date (Wall, 2009), (ii) investors need to discern when NAVs are informative and when they are not e.g., fair values reported in the early parts of a fund life are less meaningful when only a fraction of an investor's capital commitment has been drawn down (Cambridge Associates, 2020; Mathonet and Monjanel, 2006b), and (iii) NAVs change from time to time for reasons other than fair valuation adjustments i.e. because of cash adjustments.

Although the foregoing suggests that the implementation of the FVAF for private equity is much like trying to square the circle, various institutional actors strengthened their commitment to institutionalizing the use of FVAF for financial reporting. Such include the SEC, which set up enforcement arms to inspect and ensure that errant GPs are taken to task for misrepresenting fair values, which on one hand, suggests the regulator's continued support for the FVAF, and on the other hand, is testament to the scope of misuse. At the time of writing, the SEC is also contemplating imposing greater and more frequent disclosures by private equity firms. The SEC is concerned that the lack of transparency that may contribute to misallocations of capital and market disruptions (Lee, 2021; Franck, 2022). The SEC's newly minted chairman, Gary Gensler, is a former Goldman Sachs banker, academic and commodities regulator that has a reputation for his tough enforcement of rules (Ponciano, 2021). Gensler's motivations to impose more disclosures stems from the trillions of dollars being raised from pension funds and wealthy individuals and his belief that the industry needs to share information that is important to those investors (Franck, 2022; Pisani, 2022).

Auditors have also come in support of professional valuation agents as a control for misstatement risks. The SEC in turn regulates the PCAOB, which takes on the role of introducing new audit standards for listed entities and SEC-registered brokers and dealers. It is noteworthy that the PCAOB's audit guidelines have a knock-on effect for non-public companies because of the sharing and harmonisation of audit practice notes and risk-based audit approaches with the AICPA. For instance, the AICPA has also released a new standard, Auditing Standards (SAS) No. 143, with many similarities to the PCAOB equivalent, which will be effective in December 2023 (White, 2021). The AICPA's revised audit standards cover

the application of professional scepticism and a requirement to address potential management bias as well as more stringent assessment of the company's third-party valuation agents, including their professional qualifications, knowledge, skill, and relationship to the company. In this regard, the establishment of the IVSC is also noteworthy as it establishes and maintains international valuation and professional standards to support the development of the global valuation profession, including third-party valuers. The IVSC cooperates with the FASB and IASB to ensure that its valuation standards remain relevant for use.

Finally, the private equity industry is also supported by industry groups such as Invest Europe and the ILPA that have been creating guidelines and reporting templates to overcome the challenges of administering, interpreting, and applying performance metrics for private equity funds. Such guidelines have the objective of educating investors such as by cautioning the use of fair values where money changes hands such as in the payment of carried interest and paying management fees (ILPA Principles 3.0, 2019).

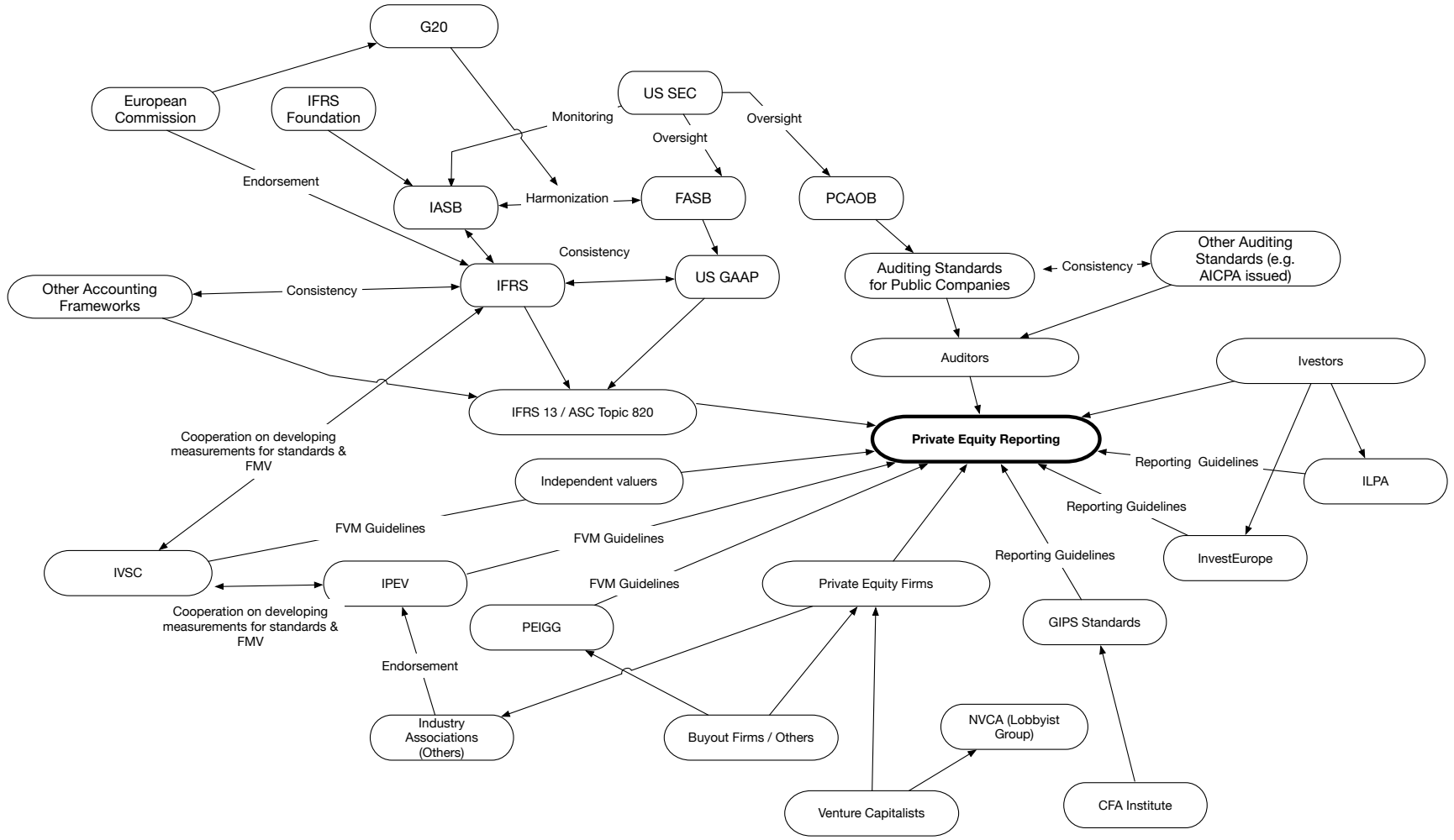


Figure 1: Actors shaping private equity reporting practices

Table 1: List of Actors

Actor	Description of activities
Private Equity Industry Guidelines Group ("PEIGG")	The PEIGG produced advisory valuation guidelines in the US.
Private Equity and Venture Capital Valuation (IPEV) Guidelines Board	The IPEV sets out recommendations, intended to represent current best practice, on the valuation of Private Capital Investments. The objectives of these Valuations Guidelines is to set out best practice where Private Capital Investments are reported at 'Fair Value' and hence to help investors in Private Capital Funds make better economic decisions.
CFA Institute	The CFA Institute is a global, not-for-profit professional organization that provides investment professionals with finance education. It aims to promote the standards in ethics, education, and professional excellence in the global investment industry.
The Institutional Limited Partners Association ("ILPA")	The ILPA is a trade association for institutional limited partners in the private equity asset class, to develop a set of standardized best practices and reporting templates to improve GP/LP transparency and generate industry efficiencies.
Invest Europe	Invest Europe is a trade association representing Europe's private equity, venture capital and infrastructure sectors, as well as their investors.
National Venture Capital Association ("NVCA")	The NVCA is an organization that represents the US venture capital community. It advocates policies that encourage innovation and reward long-term investment, and is a resource for venture capital forms and data.
American Investment Council ("AIC")	The AIC, formerly the Private Equity Growth Capital Council (PEGCC), is a lobbying, advocacy, and research organization based in Washington, D.C., that was launched by a consortium of private equity firms in February 2007. It focuses on defending and promoting the private equity and growth capital investment industry to lawmakers and the public at large. Its members include some of the world's largest private equity firms.
Financial Accounting Standards Board ("FASB")	The FASB is an independent nonprofit organization responsible for establishing accounting and financial reporting standards for companies and nonprofit organizations in the United States, following generally accepted accounting principles (GAAP).
International Accounting Standards Board ("IASB")	The IASB is an independent, private-sector body that develops and approves International Financial Reporting Standards (IFRSs). The IASB operates under the oversight of the IFRS Foundation.
The US Securities and Exchange Commission ("SEC")	The SEC is an independent agency of the United States federal government, created in the aftermath of the Wall Street Crash of 1929. The primary purpose of the SEC is to enforce the law against market manipulation.
EU Commission ("EU Commission")	The EU Commission is the executive branch of the European Union (EU).
Group of Twenty ("G20")	The G20 comprises 19 major advanced and emerging economies and the European Union. The G20 holds a strategic role in securing future global economic growth and prosperity. Together, the G20 members represent more than 80 percent of world GDP, 75 percent of international trade and 60 percent of the world population.
Public Company Accounting Oversight Board ("PCAOB")	The PCAOB oversees the audits of US listed public companies and SEC-registered brokers and dealers.
International Valuation Standards Council ("IVSC")	The IVSC is the independent global standard setter for the valuation profession.

4 Deciphering the role and impact of fair value accounting on the private equity industry

Chapter 3 describes the challenges and transformative effects of the FVA architecture on the private equity industry and explains that, more than an accounting product, the FVAF is an ‘institutional’ product because it is shaped by various institutional forces to make it “fit for use”. The following chapter sheds light on two additional research areas with regards to the FVAF: (i) What is the key offering of an imprecise accounting tool and are there any specific traits mandated of the financial statement user? and (ii) exploring the costs associated with sustaining an ‘institutional’ product and associated phenomena such as constituency effects.

4.1 FVAF as a risk management tool

To summarize some of the important findings of Chapter 3, investors shoulder an immense burden in the interpretation of the fund NAV, the largest component of which is the fair value of the fund’s underlying investments. A significant amount of contextual analysis is required before such numbers can be consumed for any forms of use. For instance, Mathonet and Monjanel (2006b) explain that fund NAVs portray a distorted view of the underlying economic substance and do not necessarily capture all the risks the limited partners are exposed to. They explain that the NAV does not explain how the manager can add value to the portfolio companies and that this figure is static – it only reflects the performance of the capital that has been called from investors but does not convey information on how the remaining unfunded capital will be deployed and what the payoff from these future drawdowns could look like (Mathonet and Monjanel, 2006b). Therefore, the authors assert that the NAV becomes more relevant as the fund matures, portfolio companies are stable and unfunded commitments taper (Mathonet and Monjanel, 2006b).

In the same vein, Cambridge Associates (2020) advises that most private equity funds take at least six years to settle into their final quartile ranking, and before such time they typically rank in two to three other quartiles (Cambridge Associates, 2020). This advice reduces the reliability of using interim return data to compare performance across a batch of younger vintage funds. Korteweg (2018) also describes how a fund NAV reported net of carried interest is not an

appropriate measure to gather intelligence on relative GP performance because carried interest is only payable when a GP has succeeded in returning capital in excess of the hurdle rate, and this has the effect of lowering the NAV (Berk and Green, 2004 cited in Korteweg, 2018).

Calculating risk and return information for private equity also needs to be managed carefully to account for time decay (fair values are reported 45 to 60 days after date of measurement) (Wall, 2009), low-frequency reporting (quarterly) (Wall, 2009), smoothing (Lerner, 2022), and possible manipulation (Jenkinson, Sousa and Stucke, 2013; Barber and Yasuda, 2017). As a result of the foregoing shortcomings, the ILPA recommends that investors avoid paying management fees and carried interest on the basis of fund NAV (ILPA Principles 3.0, 2019). Furthermore, if alternative carried interest models, such as the use of the deal-by-deal carried interest model with interim clawbacks, are used then the ILPA recommends avoiding the use of fair values held higher than cost when calculating interim clawbacks on carried interest (ILPA Principles 3.0, 2019).

Overall, it is worth stating that the FVAF has certainly brought with it new complexity in financial reporting for private equity! So, what explains the continued support of such an accounting framework?

In evaluating its attributes, FVA cannot be used in conventional ways as it is in perhaps the mutual fund or hedge fund history e.g., to price the subscription, redemption, or sale of fund units. This is because traditional private equity funds are not unitized and not structured as open-ended funds. Furthermore, private equity funds do not provide rights to voluntary redemptions. Even on the secondary market, sophisticated secondary players avoid the use of fund NAVs in favour of a bottom-up analysis when pricing secondaries (Hupp, 2009; Scarpa et al., 2015; Secondaries Investor, 2017). To reiterate, the profile of established secondary buyers includes specialist boutiques and large fund-of-fund investors hoping to arbitrage on mispriced fund NAVs. To quote one such investor, Rudy Scarpa, Partner at Pantheon says *“There are still inefficiencies in the secondary market. We need to remember that we’re buying limited partnership interests in private funds that are in turn invested in private companies. While eventually general partners sell those companies at their market value to generate good returns, a portfolio company’s current net asset value (NAV) doesn’t always equate to current*

fair market value and that translates into market inefficiencies. As long as inefficiencies persist, there are opportunities for secondary buyers to generate attractive returns”.

The nature of fair valuations for private equity also does not create a strong argument for “comparability”, particularly because valuation techniques differ from manager to manager. Barker and Schulte (2017) explain that this is made possible because the practice of estimating fair values in the absence of quoted prices can be varied, leading to some companies using areas of judgment more than others. In the same vein, Spiegel and McCavitt (2009) explain how certain investments can be valued very differently across private equity firms as one private equity firm may consider a public comparable in valuing while another fund sponsor determines no comparable exists. They explain the consequence of such as follows: *“For an institutional investor holding the same investment through different fund sponsors, this means it could have multiple valuations for the same investment in its portfolio. The existence of multiple valuations can undermine investor confidence, which is already in short supply.”*

So, in what ways does the FVAF deliver?

As a first step, it is important to consider how the private equity industry has transformed following the introduction of the FVAF. Figure 2 and Figure 3 illustrate the actors that the GP would have interfaced with before and after the introduction of the FVAF respectively. As can be seen from these illustrations, pre-FVA, GPs would have been collecting a lot of information from their portfolio companies for their own consumption and performance assessment but were preparing and distributing financial statements using the legacy valuation practices of holding investments at cost or latest equity raise, thus, not sharing any information that they possessed unless if they voluntarily decided to do so. With regards to LBOs, there was arguably the bankers that required portfolio company information to extent they were extended debt to the targets. In summary, however, the private equity industry would have not only been insular but also opaque to its own investors.

Post-FVA, GPs are forced to tap on market intelligence platforms and share information on their investee companies to various actors such as auditors and independent valuers. Furthermore, the introduction of FVA has also shaped the way GPs communicate with investors with the latter demanding that these numbers be accompanied with investment

commentary to support with contextualizing movements in NAVs. For instance, Borders (2010) explains that venture capital investors demand far more information than is contained in the financial statements. A similar point is also noted in the letter from Adam Street Partners to the FASB in 2009. The private equity firm expounds how investors are focused on the potential future value of the investment and the steps to get to that point rather than in the variation of fair valuations at the measurement date and that *“often this potential exit information is shared in general descriptive qualitative ways with limited partners. This information is in almost all cases proprietary and confidential, and much more meaningful than any derived summary statistical analysis of current value could be”* (Hupp, 2009).

Notwithstanding the above, it is fair to expect that quantitative and qualitative data be managed by an errant GP and, indeed, there are several investors that frown upon the use of unrealized track record data to select managers (preferring instead to look at realized figures). In this regard, Jenkinson, professor of finance and director of the Oxford Private Equity Institute, highlights that, *“Unless LPs only want to base their decisions on fully realised funds, they’re going to have to look at the interim data”* (Jenkinson et al., 2016). Many choose to do just that and often use their positional power to adopt an “inspect” not “expect” strategy to ensure they are being passed good data (Fumai, 2015; Kim and Knauth, 2020b).

For instance, Wall (2009) writes how GPs were inspecting valuations during the GFC and were even deviating from fund NAVs because they had better data to perform their own analysis. Mathonet and Monjanel (2006b) explained that the EIF would review the valuation guidelines applied by the underlying fund with the objective to assess if the fund followed IFRS-compliance guidelines and also did spot checks on a few portfolio companies. Zenni, Jr, president and CEO of Z Capital also speaks about the sophistication of private equity investors, *“LPs are very intelligent, and so our approach is to be transparent. If performance dips, it is my experience – although we haven’t had much in the way of any losses – that they just want to know that your approach was sound and your thesis was sound at the time”* (Jenkinson et al., 2016).

Legacy PE landscape

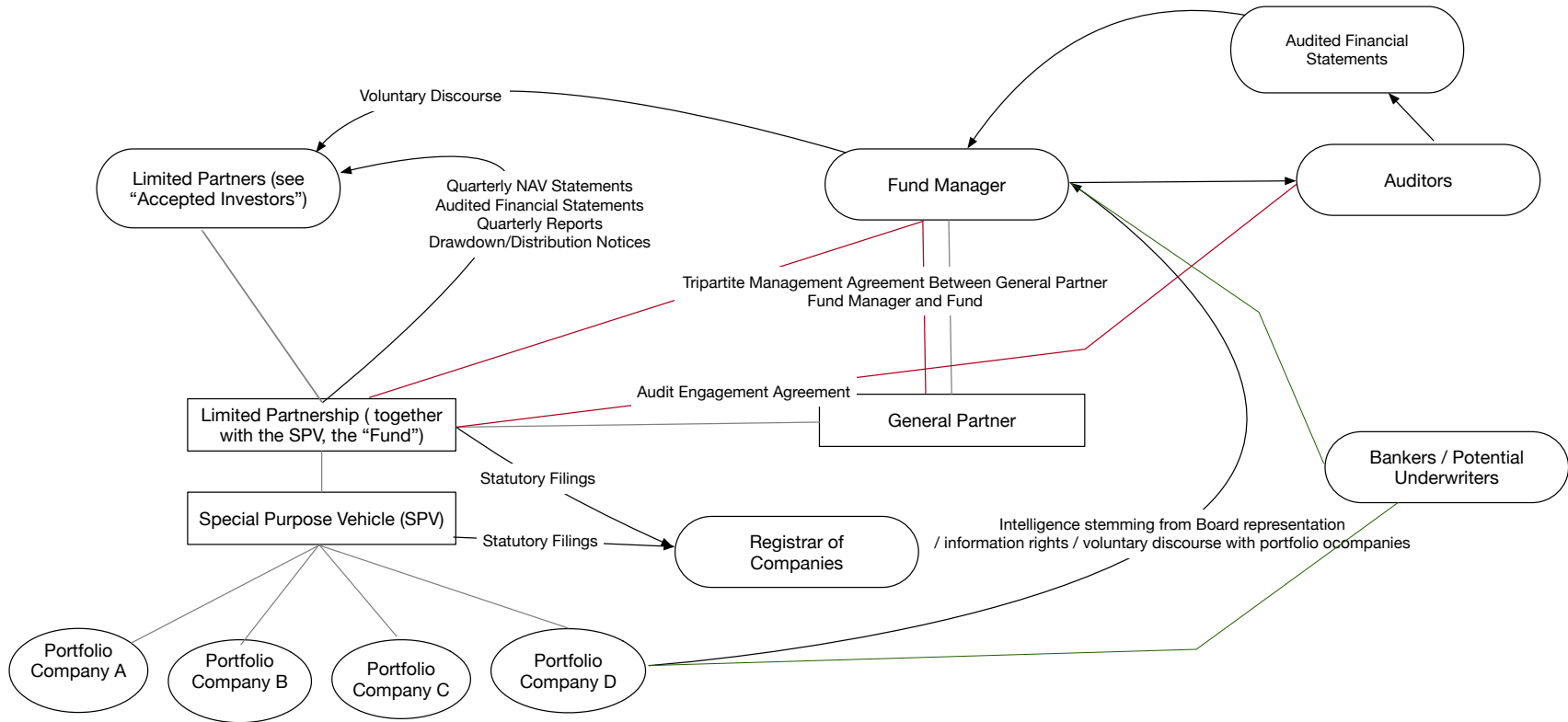


Figure 2: Legacy PE Landscape

Transformed PE landscape

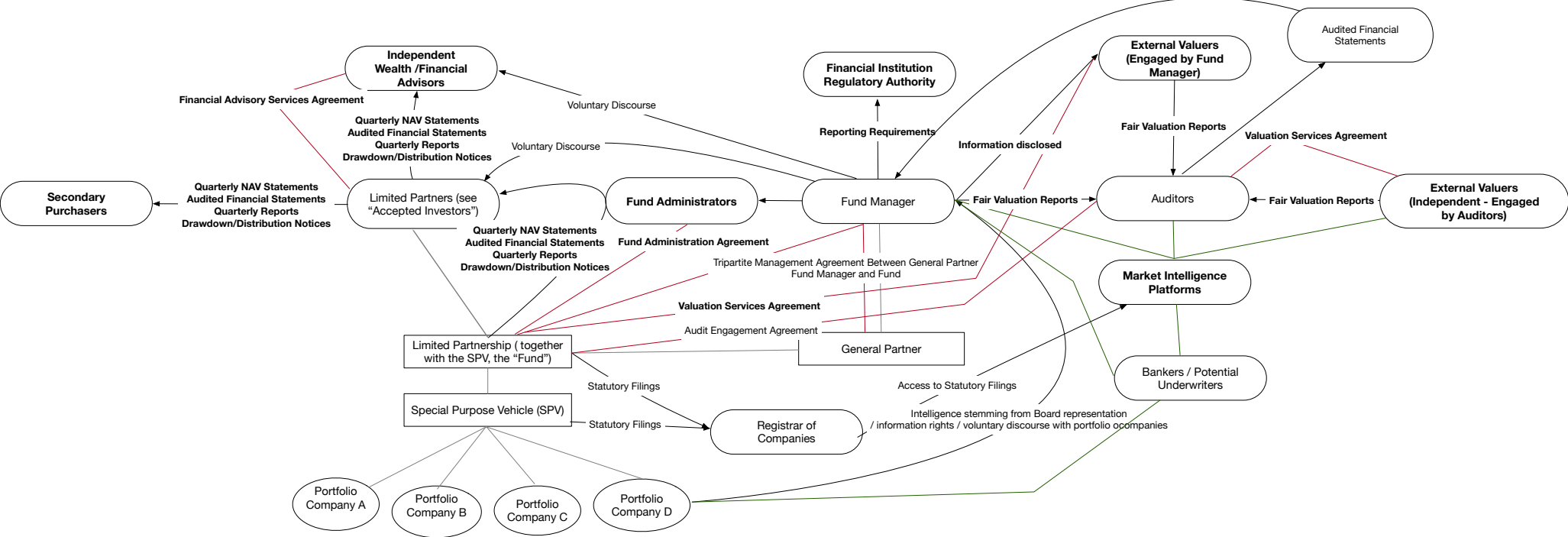


Figure 3: Transformed PE landscape

It is also important to consider the inordinate effort to “investigate” fair valuations with the findings in Chapter 2 that returns are sticky in private equity (Lerner, 2022), suggesting that this effort maybe worth the trouble because interim information can support capital risk management. It is also important to acknowledge that fair value data is becoming more actionable or - to borrow financial reporting parlance - decision-useful. Fund performance can also be a reason why an LP, or group of LPs, decides to replace a GPs post-commitment to a private equity fund. This is made possible because the modern-day private equity investor is negotiating contractual rights to remove and replace GPs even without any fault on the part of the GP (Jamieson and Dhume, 2016). Furthermore, the secondary market is also developing into a feasible means for LPs to calibrate their portfolios, such as by increasing the exposure to better performing fund managers and/or reducing exposure to others (Bloomberg, 2011).

If we think of using fair values as a means of managing risk, then Linsley and Kewell (2015) make an interesting proposition that “clumsy” risk management systems, such as the FVAF, are often implemented because there are no perfect ways to manage complex and multi-layered problems. Clumsy solutions then consider differing perspectives on how to manage such problems. In many ways, the fair value architecture is a clumsy solution to performance monitoring for private equity (which is a complex and multi-layered problem) because it is not a perfect system with there being scope for numbers to be smoothed or manipulated, but it is the lesser of two evils: historical cost accounting did not help with providing any indicator of interim performance.

Furthermore, private equity investors demonstrate the capacity to be able to adapt to the inadequacies of the FVAF. Linsey and Kewell (2015) suggest that this is no easy task in such contexts: they explain that the need for constant watchfulness in monitoring such risk is like taking on the role of Janus, who in Roman mythology, is a deity of doors, gates and transitions, and whose task as a sentinel is to look both ways at once (Linsey and Kewell, 2015). In other words, whilst the private equity investor is empowered with the ability to use this information as a risk management tool, however, there is an overarching expectation that s/he is able to adapt to its imperfections. It is noteworthy that private equity investors have a reputation for being resourceful and sophisticated in this regard. An article from the 1980s and 1990s by Fenn, Liang and Prowse (1995) alludes to this with the following commentary:

“to address the possibility that one stellar investment masks many poor ones, partnership returns based on all but the highest- yielding investment can be calculated. Even more important than an examination of the distribution of returns is an analysis of the relationship, if any, between individual investment returns and investment characteristics, such as the industry, size, and location of the portfolio companies. Such an analysis is relevant, for example, if a partnership is raising funds to invest in specific industries. Finally, investors can examine the relationship between investment returns and the general partners responsible for managing the investments; this is especially important if the partnership management firm has recently lost some key personnel.

Another approach to measuring past performance is to make a purely qualitative assessment of a partnership management firm’s skills. In some instances potential limited partners have co-invested alongside an earlier partnership, and this experience has given them an opportunity to observe how the general partners structure and manage their investments, providing insights into the general partners’ management skills. Potential limited partners that have not co-invested alongside an earlier partnership may consult others that have and may even contact companies in which the general partners have invested.”

Private equity investors continue to either have access to resources or can independently exercise prudence and analyse private equity performance contextually well into the post-FVA era. However, it is equally important to acknowledge that this is no mere coincidence: capital for private equity is raised mainly from institutional and accredited investors. To reiterate some relevant finding presented in Chapters 2 and 3, private equity investors typically fit the profile of accredited investors with deep pockets because of two reasons (i) GPs avails several regulatory exemptions so long as it offers investments to accredited investors and (ii) many private equity firms prefer to accept minimum commitments of between US\$5 million and US\$10 million, although GPs have the discretion of accepting less (Leleux, Swaay & Megally, 2015).

Private equity investors also have institutional support in the form of reporting guidelines that have been created for private equity funds to help with presentation of the various qualitative and quantitative performance metrics that investors are interested in (ILPA, 2016). Of the

notable suggestions is one that recommends the reporting of both cash and accounting returns of private equity funds as well as provide a section for management discussion and analysis of quarterly performance (ILPA, 2016).

4.2 Pertinent institutional dynamics and constituency effects

The foregoing paragraphs assess the merits of an imprecise valuation device, but little is made of the consequences of introducing an ‘institutional’ product and who pays the price of ‘manufacturing’ it. The cost of maintaining the FVAF as an institutional product comes in the form of costs of conducting valuation “inspections”, engaging auditors, independent valuers, market intelligence firms and fund administrators. Although the auditor has been around since the pre-FVA era as can be seen from Figure 2 and Figure 3, the FVAF has also expanded its job scope to include verifying the veracity of fair values, which has arguably increased paperwork and costs.

Notwithstanding the foregoing, third-party valuers appear to receive the lion’s share of the costs associated with producing fair values. In Chapter 3, it is explained that independent valuers are important to auditors in the processing of fair values because such agents provide alternative opinions of fair value. Furthermore, given the litigation risks in the US, engaging valuation specialists are a means for auditors to protect themselves (Glover, Taylor, and Wu, 2016). Similarly, the SEC’s continued scrutiny of private equity valuations is also forcing many private equity funds out of their practice of producing valuations internally and looking to independent valuation firms to perform this function instead (Kim and Knauth, 2020). Likewise, in Europe, the Alternative Investment Fund Management Directive (“AIFMD”), which came into effect in national laws across EU in July 2013 (RICS, 2021), also requires independent valuations of fund assets and assigns the responsibility of the same to the alternative investment fund manager (“AIFM”) (Linklaters, 2021; Langham Hall, 2020). The AIFMD allows an AIFM to delegate responsibility to an independent valuer subject to mandatory professional registration and sufficient professional guarantees (Langham Hall, 2020). Therefore, private equity funds that cannot organize independent valuations internally can and may have to resort to the use of third-party valuers (Zerafa and Scicluna, 2019, Langham Hall, 2020).

Although the demand for third-party valuers can be explained, the NVCA has opined that the ineffective and inappropriate use of valuation specialists is a major contributor to the excessive cost and effort that venture funds continue to experience in obtaining GAAP audits (Franklin, 2015). They explain that the auditors' "default" position will be to do more checks and require more documentation of valuations and to use more experts. Detractors of traditional audit controls also explain how the monomaniacal number crunching results in missing other issues that private equity practitioners have themselves admitted are more important in informing investors about the health of their private equity portfolios (Maher, 2009). For instance, certain GPs have explained to the FASB that answering certain questions are more important than the use of discount rates or other technical measures in determining the fate of one's investment (Maher, 2009). Such includes questions such as "*Is the portfolio company making acceptable progress toward the product development goals that serve as the investment premise?*" In the words of Curtis, Humphrey and Turley (2016), this requires "looking up from the ledger" and examining the financial statements in the context of a better understanding of what the entity's business is all about.

Despite such criticism, recommended valuation techniques in each iteration of the standards set by the IVSC and the IPEV get more and more technical. The preoccupation of being technically right is of significance because it persuades the GP to engage external help. Take for example a traditional private equity set up wherein the investment professional typically seeks to determine the present value of the future payoffs expected from an investment using an intrinsic value method. S/he works off the assumption of a transitional ownership period and an exit for the private equity investment once value creation activities have concluded. S/he submits said model to the investment committee and the deal pushes through to completion. S/he is active in managing the investment and its value creation activities. Now comes the quarterly valuation exercise and not only do best practice standards require him/her to allocate the equity value of a company across share classes with different rights as if these shares were traded on the reporting date, but it also recommends s/he use a model such as the OPM. However, using such a valuation technique does not fall into his or her core arsenal of skills and would in any case be a significant drain of his or her resources. Hupp (2009) alludes to this very same point in his letter to the FASB, when he says how additional disclosures around the use of level 3 inputs would be disruptive to the normal operations of its direct investing team. Therefore, GPs adhering to such valuation standards are persuaded to engage

the services of third-party valuers. On the whole, this phenomenon can compound private equity's existing problem on the excessive costs spent on financial reporting (Franklin, 2015)

If the services of third-party valuers are ineffective and inappropriate (Franklin, 2015), then an important question to ask is if constituency effects are in part responsible for the continued promotion of more technical models and, therefore, the services of third-party valuers. An analysis on the composition of the boards of standard setters is suggestive of the manifestation of such constituency effects. A review of the composition of the IPEV Board reveals that it largely comprises representatives from the audit community or those that have qualified as chartered accountants and who have begun their careers in companies such as Arthur Andersen and Ernst and Whinney (IPEV, 2022). However, the IPEV Board is also advised by David Larson, a representative from Duff and Phelps' (now known as Kroll) valuation practice (IPEV, 2022). According to the IPEV website, Larsen was also "instrumental in developing and drafting the PEIGG Valuation and Reporting Guidelines and is a member of FASB's Valuation Resource Group responsible for providing the board with input on potential clarifying guidance on issues relating to the application of the principles of FASB Statement No. 157, Fair Value Measurements" (IPEV, 2022). Mr Larsen is noticeably also an employee of Duff and Phelps', which has intriguingly turned its valuation services businesses into a significant profit centre. An internet search on publicly disclosed information shows that in 2012, the company's largest revenue line was its valuation advisory business (Mantone, 2017). An article by Mergers and Inquisitions (2020) also reports that the Big 4 Firms – Deloitte, E&Y, PwC, and KPMG – have business valuation businesses mainly to support their audit practice but outside of these companies the largest independent valuation firm is Duff and Phelps.

It is important to compare the composition of the IPEV Board with that of the NVCA, which comprises GPs and managing directors of venture capital firms (NVCA, 2022). The leanings of each board align with the IPEV's support for the fair value measurement standards and the support for more technical prescriptions, and with the NVCA's scepticism and concern on the state of audit practice and the use of ineffective and inappropriate use valuation specialists (NVCA, 2015).

Similar observations can be made when the same form of analysis is applied to the IVSC, which positions itself as an independent, not-for-profit global standard setter for the valuation

profession. Just like the IPEV Committee does for the private equity and venture capital community, the IVSC leads the development of frameworks of guidance for both in-house and professional valuers – their aim being to provide consistent delivery of the standards by trained professionals. As explained in Chapter 3, the IVSC has made itself relevant, by entering into cooperation agreements with IFRS and IPEV to ensure consistency in the frameworks (IASPlus, 2019; IVSC, 2011). The IVSC is standard setter of significance: it boasts more than 180 members organizations operating in 137 countries. Constituency effects in favour of professional valuer’s need are highly possibly because the members that sit on the IVSC’s Financial Instruments Board have roots in agencies that offer valuation and pricing services, each of the fields that benefit from the extant accounting framework (IVSC, 2021b). Furthermore, a quick glance at the company’s financial statements for FY20 shows income largely stemming from donations, sponsorship and grants, membership subscription fees, as well as publications and related activities amount to slightly over GBP 1.4m (IVSC, 2021a). The sponsors, interestingly show big name valuation firms such as Houlihan Lokey, RICS, Kroll, Grand Thornton, as well as various appraisal industry groups (IVSC, 2021c).

4.3 Summary

There are several merits to supporting the FVAF despite its many shortcomings because investors in private equity demonstrate that they have the traits of being capable risk managers: they consume fair value data with caution and demand other forms of information to perform contextual analysis (Hupp, 2009; Border 2010; Jenkinson et al., 2016). Industry groups such as the ILPA, representing private equity’s institutional investor base, have also designed reporting guidelines meant to support investors with multi-angled performance measurement (ILPA, 2016).

However, the cost of preparing, processing, administering, and interpreting fair values is high. GPs need to engage third-party valuers to reduce risk of non-compliance with regulatory requirements for independent valuations under regulatory frameworks such as the AIFMD. In the US, examination and enforcement action by the SEC is also leading GPs to use third-party agents to protect themselves (Kim and Knauth, 2020). Similarly, auditors favour the use of valuation specialists to reduce the risk of misstated valuations (Glover, Taylor, and Wu, 2016).

The high costs of maintaining the FVAF is also a reason to constantly monitor the manifestation of constituency effects because certain actors draw significant monetary benefits

from the use of the standards. In the case of third-party valuers, this thesis finds professional valuers have influential positions on the boards of standard setters such as the IPEV Committee and IVSC. They can use this positional power to promote arithmetic models that GPs do not have the time nor the skills set to construct. Therefore, GPs adhering to such valuation standards are persuaded to engage the services of third-party valuers. On the whole, such trends exacerbate private equity's existing problem on the excessive costs of valuation exercises for financial reporting purposes (Franklin, 2015).

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5 Conclusion

The following chapter summarizes the main findings of this thesis and concludes by describing pertinent implications of the research findings.

5.1 The rise of the FVAF for private equity

Several contemporaneous events led to the rise of the FVAF for the private equity industry in the early 2000s. First and foremost, poor exit activity following the DotCom bust left private equity investors without a reliable indicator of fund performance and drummed up concerns that private equity was underperforming (Brull, 2003, Creswell, 2003). Such concerns were compounded because private equity's legacy valuation practice of holding investments at cost or latest equity raise was at risk of concealing a much grimmer reality (CCBJ, 2007). The advancement of FVA concepts for private equity was also partly attributable to ballooning commitments from pension funds motivated to close their funding gap by investing with higher yielding asset classes (Merton, 2014; Tuck School of Business, 2003). Many of these pension funds, which continue to be important clients for private equity firms, require GPs to prepare financial reports in accordance with US GAAP and, therefore, comply with fair value techniques (Easton, Larocque and Stevens, 2019). An additional source of pressure to adopt FVA concepts also stemmed from the auditors of pension funds because of changes in audit guidance (CCBJ, 2007). These factors collectively eroded private equity's position that fair value estimates were arbitrary and that it was better to demonstrate skill by showing exits instead (Venture Capital Journal, 2004). The foregoing constellation of events also led to the coalescing of standard setters such as the PEIGG and the IPEV Committee, each with the objective of advancing the use of FVA concepts for private equity.

What also happened in parallel was that the FASB was under pressure by the SEC to issue principle-based guidelines on how fair value estimates should be measured following major securities fraud events such as Enron (Herdman, 2002). This eventually led to the FASB's release of ASC Topic 820 (then known as SFAS 157) which became effective in November 2007. The release of ASC Topic 820 also led to the increasing the relevance of valuation guidelines such as those drafted by the IPEV Committee and PEIGG for the private equity industry.

5.2 Consequences and scale of impact

The adoption and implementation of the FVAF has brought with it several challenges. One of the first issues that emerged with the use of the FVAF was how private equity firms could provide investors with interim return information without divulging confidential information to the public. Jesse Reyes (2012) described the conundrum as follows “...*some claim that too much transparency in the private equity context is much like killing the goose that laid the golden egg: because performance in alternative asset classes is often attained through inefficiencies in market information. They suggest that too much transparency destroys those inefficiencies in ways that will ultimately penalize the investor.*”

The industry’s hesitance towards any performance data being at threat of public disclosure was also on prominent display in the early 2000s in what was described as a “firestorm over disclosure of information concerning private equity investments” (Cohen, 2005). At the material time, certain private equity funds were threatening to terminate relationships with investors subject to FOIA requirements because these investors were legally obliged to disclose information on their private equity exposures (IVCA, 2006; Primack, 2020; Leleux, Swaay & Megally, 2015). These concerns have, in the meantime, simmered in part by US state FOIA laws which are clear on the non-disclosure of portfolio company information (Cohen, 2005).

The next issue was that GPs were not entirely sold on the idea of marking-to-market. The issue was framed by Blackstone Chairman and CEO, Stephen Schwartzman as follows, “*What they are trying to ask you to do is value your companies as if you’re going to sell them at the bottom of a recession,*” (Financial Times, Gloom hits buy-out gathering, February 3, 2009 cited in Leleux, Swaay & Megally, 2015). This tension point is speculated to be the reason why many GPs did not write down their valuations as much as they needed to during the GFC (Davies, 2009). Even when markets are not turbulent, GPs still tend to smooth their numbers, a practice which complicates risk measurements by understating the asset class’s standard deviation of returns and correlation with other liquid asset classes (Tuck School of Business, 2003; Korteweg and Sorensen, 2011; Lerner, 2022). It is also notable that no solutions have been found with regards to measuring risk accurately for private markets. Lerner (2022) advises that “*we are at the same stage that we were with public markets back in the mid-1960s, when Sharpe, Lintner, and their colleagues published the CAPM*”.

Although smoothing is an issue in calculating interim risk and return, what has been more concerning is that certain academics have found patterns of upward valuations at around the time of fundraisings (Jenkinson, Sousa and Stucke, 2013; Barber and Yasuda, 2017). Academic research also shows strong links between GPs inflating unrealized IRRs in different contexts such as when information asymmetries are high and where accounting and legal environments are less restrictive (Cumming and Walz, 2010).

Over time, other complexities in interpreting and using fair value data for private equity have also become apparent. Consultants and academics have advised that interim return information is not meaningful in the early parts of a fund's life (Cambridge Associates, 2020; Mathonet and Monjanel, 2006b). Administration has also become complex because stale numbers need adjusting (Wall, 2009) or risk creating problems such as what was experienced by pension funds that found themselves in a technical breach during the GFC because 60 day old fund NAVs were being compared with spot prices of liquid asset classes (Hegi and Nutti, 2011). Korteweg (2018) also describes how a fund NAV reported net of carried interest is not an appropriate measure to gather intelligence on relative GP performance because carried interest is only payable when a GP has succeeded in returning capital in excess of the hurdle rate, and this has the effect of lowering the NAV.

5.3 Transformation

Many institutional actors have come forward to strengthen their commitment to the use of the FVAF despite the suite of operational challenges associated with its use. In the US, the SEC examines and takes enforcement action if misconduct is discovered pertaining to matters concerning financial reporting and performance presentation (Puca, 2013; Bowden 2014). Certain regulatory frameworks such as the AIFMD also require independent valuations (Linklaters, 2021; Langham Hall, 2020). In the same vein, in the US, the PCAOB and AICPA have also imposed more stringent audit guidelines for public and private companies, which has intensified the 'paper pushing' at year-end audits and has promoted the engagement of independent valuers to manage detection risks. Although the auditor has been around since the pre-FVA era, FVA has also expanded its job scope to include verifying the veracity of fair values. When applying a systemic lens, it becomes more apparent that the FVAF is not just an accounting product but also an institutional product because it is produced, refined, and validated through the works of various institutional actors.

Separately, certain institutional dynamics are promoting the services of actors such as third-party valuers. The SEC's continued scrutiny of private equity valuations, for instance, is forcing many private equity funds out of their practice of producing valuations internally – many GPs look towards third-party valuation firms to perform this function instead (Kim and Knauth, 2020). Likewise, in Europe, AIFMs that cannot organize independent valuations internally may need to resort to the use of third-party valuers (Zerafa and Scicluna, 2019, Langham Hall, 2020). Auditors fearing litigation are also engaging third-party valuers to help with audits.

On the whole, it appears that self-protective behaviour as opposed to the quality of valuations is driving the use of third-party valuers. This is an area of concern because such third-party services translate into excessive costs for periodic reporting exercises with questionable benefits. These costs are borne by investors and should ideally be better justified. To provide a quote of a concerned limited partner on the costs of valuations, *“I'm hearing from some GPs that they've spent seven figures on valuation work. Well, those costs are passed down. That hurts our return”* (Private Funds CFO, 2014).

The preoccupation with the use of more and more technical models is also exacerbating the problem of valuation costs across the private equity industry because GPs without the in-house skill set to construct such models also leads to more demand for the use of services of professional valuers. GPs that want to manage the time resources of their investment professionals may be persuaded to outsource technical valuation exercises too. Bearing this in mind, it is important to scrutinize the forces that are promoting the use of more technical models especially when the range of reasonable valuations is wide and where a more technical model does not provide comfort on alleviating misstatement risks. To this end, it is important to acknowledge that professional valuers have influential positions on the boards of standard setters such as the IPEV Committee and IVSC and can use their positional power on the boards of such standard setters to advance the use of technical models and, therefore, advance the services of the professional valuer.

5.4 Risk management tool

In its entirety, private equity investors shoulder an enormous burden with the administration of private equity portfolios but also with the contextual analysis that is required of fair value reports. To manage risks of misstatement, investors groups such as the ILPA caution the use of fund NAVs – the largest component of which is fair values – when calculating management fees (ILPA Principles 3.0, 2019). The ILPA also recommends using a European carried interest model as far as possible, and if not, then it recommends using the lower of cost or fair value when calculating interim clawbacks (ILPA Principles 3.0, 2019). Secondary transactions, which are quoted as a percentage premium or discount to fund NAV, belie the fact buyers are not using these numbers to value secondary interests. Secondary investors are not relying on fund NAVs to buy limited partnership interests, they are creating their own models price transactions to exploit pricing inefficiencies (Hupp, 2009; Secondaries Investor, 2017; Scarpa et al., 2015).

So, in what ways does the FVAF deliver? Despite its limitations, FVA does provide an (imperfect) means to assess capital risks in private equity portfolios. The need to assess capital risks is exemplified by patterns of strong persistence in performance across portfolios managed by the same GP (Lerner, 2022). Therefore, an investor can use this information to manage risk exposure to certain GPs. Calibrating exposure to certain GPs is made possible because the secondary market is developing into a feasible means of purchasing and selling LP positions. Separately, the modern-day LP is also negotiating rights to remove and replace GPs post-commitment for circumstances outside of fraud and other types of misconduct (Jamieson and Dhume, 2016) i.e., investors can trigger “no-fault” divorces because of perceived fund performance. These options turn interim performance data into information that is actionable.

Although the FVAF is an imperfect risk management tool, LPs demonstrate the traits of being competent risk managers, because they adapt to its inadequacies. However, this is no coincidence, private equity raises capital from largely institutional and other accredited investors with deep pockets. To expound, since the 1980s, many of such investors have demonstrated traits of prudent performance evaluation. Well into the FVA-era, these same investors use fair value data with a gamut of other information (Hupp, 2009; Borders, 2010; Jenkinson et al., 2016) to assess GP skill. Even within the scope of simple monitoring, there are accounts of investors engaging in active discourse with GPs when explanations are required

(Fumai, 2015; Kim and Knauth, 2020b). The introduction of the FVAF has, therefore, opened up the portals of communication which can reduce information asymmetry between the GP and LPs. Zenni, Jr, president and CEO of Z Capital summarized the case of using FVAF for private equity investors as follows, “*LPs are very intelligent, and so our approach is to be transparent. If performance dips, it is my experience – although we haven’t had much in the way of any losses – that they just want to know that your approach was sound and your thesis was sound at the time*” (Jenkinson et al., 2016).

5.5 Significance of findings

Novice investors

The use of excessive audit controls may be creating the optics of significantly reducing inherent risk in fair value exercises i.e. the flotilla of valuation experts and the trends towards the use of more technical models may be creating misconceptions that inherent risks in fair valuations can be narrowed or completely extinguished, especially to the less informed investor. Some SEC enforcement cases have also shown how governance features such as the use of third-party valuation firms and audit by third-party auditors are being marketed to improve investor confidence in reported numbers (Sec.gov, 2013). This is a concerning discovery as fair value data could be masquerading as being more precise than it actually is.

Notwithstanding the foregoing, the risks of interpreting fair values at face value are now contained: the private equity industry interfaces minimally with retail investors as most of its funds are raised from accredited investors. Moreover, there is substance in the claim that such investors are competent investment managers that can inspect valuations and demand for a breadth of information on fund performance (Mathonet and Monjanel, 2006b; Wall, 2009; Hupp, 2009; Borders, 2010; Jenkinson et al., 2016). Considering the foregoing, trends advocating the democratisation of private equity need to be looked at more closely. Novice private equity investors, with little knowledge of the features of the asset class, or relying solely on the movement of the NAV without the skillset to analyse other parameters for investment in private equity, are susceptible to reaching incorrect conclusions. This makes recent regulatory changes that allow mom-and-pop investors to gain access to private equity via their defined contribution pension plans, the 401(k) (Schultz, 2021, Aktug, 2021) as areas to be watched carefully.

It is also useful to be reminded of certain comments made by Brian G. Cartwright, General Counsel of the SEC in the late 2000s (Cartwright, 2007). Cartwright spoke about the “Future of Securities Regulation” and coined the term “deretailization” to describe how retail investors were not permitted to invest in high-risk investments such as private equity, venture capital and hedge funds (Cartwright, 2007). He explained that amateur retail investors are at a disadvantage to professionals as the financial markets have become far more sophisticated and mathematical. His statements are consistent with the findings presented in this thesis (Cartwright, 2007).

Acknowledging these same points was a subcommittee of the SEC tasked to evaluate permissibility of opening up private equity to retail investors (PI Subcommittee, 2021). Of various recommendations was one that retail investors be chaperoned by professional ones i.e., retail investors be allowed to invest in certain private equity funds with material participation by sophisticated institutional investors because these institutional investors would have carefully considered the risk and potential returns of the investment and the appropriateness of the fees being charged (PI Subcommittee. 2021).

It is important to point out that even for an accredited investor, the administration and interpretation of fair value data of private equity is challenging. Lerner (2022) notes this when he explains,

“The most successful [private equity] investors also tend to have a process for institutionalised learning. They go through a structured process of periodic self-examination. This isn’t just about looking at their aggregate returns but looking at why they chose funds that underperformed and why they passed on funds that ultimately did well. They try to identify the features of successful teams and figure out how to incorporate those learnings into subsequent investment decisions.”

It is equally important to acknowledge that not all accredited investors have the appetite to manage private equity’s idiosyncrasies, particularly with regards to financial reporting. An article published by Bloomberg News (2011) cites Brian Talbot, head of New York-based Neuberger Berman Group LLC's secondaries team explaining the following: *“Pensions are invested in hundreds of funds, which has become a huge administrative burden that many of*

them have decided they can't manage efficiently." Others are simply dissuaded from investing in private equity from the get-go because it lacks the hallmarks of a traditional mainstream class. Norway's finance ministry echoed this view when it ruled that the country's 8.1 trillion krone sovereign wealth fund was not to expand into private equity. Norway's finance ministry explained that the opaque and fee-heavy asset class would not be suitable for the Government Pension Fund, which adheres to such management principles such as high transparency and low investment management costs (Whyte, 2018). The Financial Times has also reported that the majority of institutional investors planned to increase their allocation to private equity but a lack of transparency in the sector was emerging as a barrier to investment (Mooney, 2016).

The same issues continue to persist at the time of writing this thesis. According to a survey by State Street (2021), investors plan to increase their explore to private equity in the next three to five years as investors seek higher yields and greater diversification. However, the survey also reveals that 64% of respondents find that the weak standards of accounting and audit controls are significant barriers to entry (State Street, 2021). The survey also reports that investors are evaluating data management and data quality validation as part of the due diligence process for manager selection as they continue to seek better quality and timely information from the asset class (State Street, 2021). They also expect that private equity firms invest in technology to provide investors with such transparency (State Street, 2021).

First time and smaller fund managers

Finally, there is a pressing need for further research into the impact of the FVAF and the existing governance framework on the operations and fundraising processes of first time and smaller private equity fund managers investing in esoteric industries. To explain, private equity is not a homogenous asset class. Private equity as a group comprises a mix of emerging and established GPs, some maybe specialists whereas others maybe generalists, each investing in assets that range from those that are hard-to-value to those that are easier to value and verify. As a result, even though FVA could be championed as a tool to manage capital exposure to certain GPs, there are corners of private equity that may find it a less effective risk management tool than others.

On one hand, first-time and smaller private equity funds investing in esoteric investments that have not built up a reputation are unlikely to convince investors and consultants to use

unrealized track record information as a gauge of GP skill as such information may appear abstract. However, these GPs are still likely to rake up high expense ratios to reduce regulatory compliance risks. These firms are likely to pitch to investment consultants to raise capital but are also unlikely to make it on their radar because as investment consultants have determined *“most private equity funds take at least six years to settle into their final quartile ranking, and before this settling they typically rank in 2-3 other quartiles”* (Cambridge Associates, 2020). The other issue at hand is that these investment consultants are growing into significant gatekeepers to institutional capital, therefore, it can be surmised that first- and small private equity fund managers will likely have significant challenges in raising capital. As a coping mechanism, such fund managers may ironically need to exaggerate valuations, as well as use grandstanding and short-termism techniques to support fundraising activities.

These arguments are consistent with the findings of Barber and Yasuda (2017), who show how interim performance has large effects on fundraising outcomes, particularly for low reputation GPs and those that have some exits to show for. It is useful to note that grandstanding and short-termism is noted particularly in the venture capital space (Amor and Kooli, 2018; Gompers, 1996), which can be an effect of new technology trends spawning many new entrants. As a result, fundraising for subsequent funds can encourage short-termism, which should be of concern as these grandstanding activities often come at the cost of under-pricing (Lee and Wahal, 2004).

It is also interesting to note that the specific needs and challenges of private equity firms such as venture capital fund managers (“VCFMs”) are acknowledged in certain areas of the world such as Singapore. The Monetary Authority of Singapore (“MAS”) requires capital markets service license holders such as GPs to have assets under management independently valued but interestingly does not require the same from VCFMs. This helps to reduce the cost of bureaucracy for these fund managers and promote the vibrancy of the venture capital community in Singapore (MAS, 2017). MAS has, nonetheless, continued to keep some safeguards: VCFMs can only raise capital from qualified investors because accredited investors and institutional are expected to be able to protect themselves (MAS, 2017). MAS also did not remove penalties for misconduct: it retained the power to revoke the regulatory status of the venture capital fund manager, and issue prohibition orders against the CEOs, directors and representatives of the GP that misused these liberties (MAS, 2017).

Although new entrants without established reputations and fund managers investing in esoteric areas are unlikely to extract significant benefits from the use of the FVAF, there are other corners of the private equity industry that are growing assets under management and introducing new types of investment structures on the back of the FVAF. Such include GPs operating in mainstream industries as well as those that have built good reputations and are able to use this trust to use track record information to raise additional capital. In the past few years, there has been renewed interest in evergreen or “open-ended” private equity funds, intriguingly even for subcategories of private equity such as venture capital. Many of these pitches, unsurprisingly, stem from large and reputed GPs (Sequoia Capital US/Europe, 2021; Howarth and Ivanac, 2021). Evergreen structures appeal to investors that want more liquidity and lower re-investment risks, because unlike traditional fixed-life closed-ended private equity funds, these funds are likely to be unitized. In such a fund structure, the FVAF plays a central role because frequent marking of assets allows investors to price their units for purchase, redemption and sale (Howarth and Ivanac, 2021).

5.6 Research contributions and policy implications

The opening chapter of this thesis cites from a speech of the former Chief Accountant of the SEC, Robert K. Herdman, where he acknowledges that a principle-based accounting standard would require greater discipline by various institutional actors, including standard setters, accountants, and regulators (Herdman 2002). His speech articulated the SEC’s belief that under such an accounting framework, similar transactions would not be reported in materially different ways, and such a quality would preserve comparability and mitigate opportunities to financial engineer around the rules (Herdman, 2002). His predecessor, Lynn E. Turner, also shared the SEC’s view that fair value accounting should be applicable to all industry groupings, despite the belief by some that they are different (Turner, 2001). His comments came in response to a JWG paper, which opined fair value as being the most relevant measurement attribute for all financial instruments and that sufficiently reliable estimates of the fair value of financial instruments were obtainable for financial reporting purposes, with the exception of certain private equity investments.

Time has shown, however, that not all the ex-ante ambitions of the SEC have been met in the context of the private equity industry. There is scope for errant GPs to manipulate fair values,

with some research indicating that GPs inflate fund performance when information asymmetries are high as well as when accounting and legal environments are less restrictive (Cumming and Walz, 2010). Comparability is also compromised when one preparer determines that a listed comparable is available whilst another determining that no comparable exists (Spiegel and McCavitt, 2009). Even if such problems had scope for remediation, private equity valuations are still model-based estimates that are often be stale by the time they reach the hands of investors (CalPERS, 2019).

It is often tempting to take a dogmatic approach and label the FVAF as a misfit for the private equity industry. This is where this thesis shows that the FVAF's role in the private equity industry is not a black or white matter. The study of the impact of the FVAF in the private equity industry unravels more like a Matryoshka doll, unveiling how it has the potential to inform, misinform, and transform! It also shows that various institutional forces have banded together to shape the FVAF so it is fit for use. The following paragraphs investigate how the findings of this thesis can be applied to a range of sociological themes and issues that are important for policymaking and regulatory architecture aimed at the private equity industry.

Stabilizing the use of fair valuations

An ex-post examination of the impact of fair valuation for private equity show that it provides a basis to hold GPs accountable for poor performance vis-à-vis the industry's legacy reporting practices such as holding investments at cost, or the latest equity raise: the latter did little to improve information asymmetries between the GP and the LPs. With the implementation of the FVAF, investors can draw inferences about GP performance from the estimated economic value of his/her private equity investment over its holding period. This is valuable in the context of private equity as market transactions relating to the underlying portfolio can be infrequent (venture capital) or even absent (buyouts) following one's initial investment (Reyes, 2012). Mennicken and Power (2015) explain this feature as accounting being able to “*constitute and realize economic conceptions of entities and the performance of organizational agents*”. Even though fair values used in accounting are hypothetical and imaginative constructs of value, the authors argue that this fictionality is the source of “power” of fair values: fair value accounting makes the subject of valuation more market-facing “*increasing the relevance for capital market investors*” and offering an “*aestheticization of economic value*” (Mennicken and Power, 2015).

It is also important to appreciate that the private equity industry is not anomalous in its predicament nor its approach to finding workarounds to inherent problems – there are examples of other industries where, “*false numbers become performative*” because they are means to an end where no better data exists (Falconbridge and Muzio, 2021). Such is the case of the French pharmaceutical industry where doctors’ prescriptions that generate sales remain hidden from pharmaceutical companies for regulatory reasons making it hard to assess the performance of their drug representatives (Dambrin and Robson, 2011 cited in Falconbridge and Muzio’s 2021). Dambrin and Robson (2011) write,

“Thus, the singular problem of sales performance measurement in the pharmaceutical industry lies in the fact that pharmaceutical companies in France are unable to draw a direct trace between a drug representative’s activities (such as the visits to a doctor), the prescriptions the doctor will write subsequent to the visit, and the resulting sales. No drug company can state that a given pharmacy sold a given drug due to a prescription from a given doctor. The normal client-management relationship linked to sales ordering and account invoicing is unavailable.”

As a result, these pharmaceutical companies find other ways to attempt to “trace” the performance of sales representatives such as by relying on three alternative information sources, namely, self-reported number of visits to health professionals, sales statistics broken down by geographic areas, as well as statistical analysis of prescriptions issued by certain anonymized group of doctors.

Although proxy data offers an innovative solution to a difficult problem, Mennicken and Power (2015) describe such constructs as having a quality of “plasticity” or “pliability” because the power of these tools can be challenged. In such light, ensuring that the FVAF is not undermined has meant that adequate checks and balances would need to put in place to ensure the robustness of the tool. Former Chief Accountant of the SEC Lynn E. Turner also provided similar views in his letter to the FASB when backing the implementation of the FVAF (Turner, 2001):

“The staff believes that, when appropriate controls are in place, fair value accounting should not create more, or new, opportunities for manipulation. Instead, the staff believes that fair value, when gauged together with information on risk positions, capital, and

cash flows, can be of great value in evaluating a company's performance, direction, and risk profile. Users of financial statements have shown that they are able to understand current market values of financial instruments, and to act rationally in response to (true) volatility. For many years, investors have used the reported financial results of mutual funds and other investment enterprises that carry their investments at current market values to make informed investment decisions.” (Turner, 2001)

Although Mr. Turner did not label it as such, what he was describing is what this thesis discovers to be an “institutional” product wherein various institutional forces have come together to manufacture fair values. In the private equity industry, the FVAF is shaped by the work of standard setters, third party valuers as well as regulatory enforcement teams to ensure the sanctity of private equity reporting practices (see Figure 1: Actors shaping private equity reporting practices). Beyond the roles of these actors, however, it is of chief importance to acknowledge the role of the investors and the positional power they hold to interrogate and hold GPs accountable for movements in their capital account statements. To reiterate the words of Zenni, Jr, president and CEO of Z Capital, *“LPs are very intelligent, and so our approach is to be transparent. If performance dips, it is my experience – although we haven't had much in the way of any losses – that they just want to know that your approach was sound and your thesis was sound at the time”* (Jenkinson et al., 2016). It is also important to acknowledge that this resourcefulness and prudence among such investors groups dates back to the 1980s (Anson 2002, Fenn, Liang and Prowse 1995, Lerner 2022).

Notwithstanding the foregoing, the ringfencing of private equity to institutional or accredited investors is a key pillar in stabilizing the use of the FVAF. This may appear to be a bold assertion, however, nothing in the work processes of other institutional actors such as auditors or independent valuers extinguishes estimation uncertainty from the preparation of fair values in the absence of observable data points and it is then left to such investors to discern the quality of the data in their hands. If such an assertion is startling, it is because - to borrow a Baudrillardian perspective of the matter - the use of auditors and independent valuers maybe perpetuating an artificial reality or a “simulacrum” of “better” quality fair values and such is often considered to be accepted at face value. Baudrillard (2009) cautions that whilst some simulacrum are obvious (he provides the example of Disneyland which is a simulacrum in

which fictitious characters come to life), fictitious idealism also exists in the real world but there is a danger when we cannot tell apart simulacrum from reality.

It is imperative that regulators tell apart fact from fiction and stop the build-out of a “Disneyland for fair valuations” where the numbers are ‘right’ once they are processed through the hands of the third-party valuers and auditors. In a related subject, it is also important that regulators adopt a high level of discernment when evaluating the legitimacy of third-party valuers using the label of “independence” to justify the importance of their services. One can draw parallels to the conflicts of interest that employees of private equity firms face when fair valuations are organized and prepared in-house. Similarly, third-party valuers generate significant revenue from the private equity industry, which can be argued to erode “independence” as these agents seek to maintain positive relationships with the GP to ensure recurring engagements. Regulators should, therefore, broaden their gaze to include governance of independent valuers as misconduct from these actors could also be a further source of ‘destabilization’ for the use of the FVAF. In the case of the Enron scandal, for example, valuation exercises that were undertaken by third parties for significant fees and the numbers they prepared were frequently highly optimistic and not necessarily independent (Gwilliam and Jackson, 2008).

Variation in uses

Fair value accounting was partly blamed for worsening the effects of the GFC because preparers were marking certain assets to “fire sale” prices and contributing to procyclicality (Botosan, Carrizosa and Huffman, 2011). Although this was a key theme of discussion in many accounting forums, the narrative was different for private equity because GPs were not writing down NAVs fast enough (Davies, 2009), which interestingly would have contributed to counter-cyclicality instead! As described in this thesis, the denominator effect occurs when drops in the valuations of listed securities reduce the overall value of a portfolio’s overall assets and results in an overexposure to asset classes such as private equity that have fair valuations that have not been written down fast enough. This was postulated to have led to several US pension funds offloading their private equity positions in the secondary market in an environment of heavy discounting in response to the technical breach on their target asset exposures (Bloomberg News, 2011; The Preqin Private Equity Secondaries Review, 2010).

It is important to juxtapose the events above with recommendation in a publication by the Bank for International Settlements (“BIS”) (2009) shortly after the GFC. The BIS authors argue how “*insufficient market depth or reliance on valuation models using unobservable inputs that are difficult to verify may create considerable valuation uncertainty for certain instruments*” (Bank for International Settlements, 2009). The authors suggest that one could partially de-link the valuation process from certain aspects of income and profit recognition when significant uncertainty exists. This could take the form of a valuation reserve or adjustment which would act as a “filter” (e.g., reducing the possibility that initial valuation overstatements might flow into income). The authors also recommend that the size of the reserve or adjustment could be based on the degree of uncertainty created by the weakness in the data or underlying modelling approach (Bank for International Settlements, 2009).

The various approaches of managing fair valuations elucidate a key assertion by Faulconbridge and Muzio (2021) that there will exist variation in the uses of valuation devices between groups – some choosing to “invest” in the valuation device (such as for portfolio rebalancing activities) and others choosing to ignore it (such as by taking a valuation reserve). Such variation in uses has regulatory implications because certain adverse economic impacts felt by investors may have less to do with the valuation device (the capacity of preparing precision monitoring data by using the FVAF is limited because of the ontology of how fair values are constructed in the absence of actual transaction data) and more to do with the way the valuation device is used. Furthermore, the variation of uses means that some investors find more use of the FVAF than others – this means that all investors do not have a common justification for the costs involved in preparing fair values! Regulators need to consider this view when mandating that GPs ubiquitously implement the FVAF.

Performativity

If the FVAF has the ability to influence the reality it is meant to describe, instead of merely describing it, investors may find themselves using a defective tool to measure GP skill. A paper by Faulconbridge and Muzio (2021) explores “performativity” of valuation devices and that such an outcome is possible. The authors describe three types of performativity (MacKenzie, 2006 cited in Faulconbridge and Muzio, 2021). The first, generic performativity, is where the valuation device is used by key actors but with limited observable effects on the object of valuation. The second, effective performativity, is where the valuation device is used in ways

that is transformative but without disrupting the fundamental features of the object of valuation) (Faulconbridge and Muzio, 2021). The third, Barnesian performativity, named to reflect the ideas of Barnes (1983, cited in Faulconbridge and Muzio, 2021), is where the valuation device has *“formatting effects that remake the object being valued in fundamental ways so that it better corresponds with what is deemed valuable by the valuation device in question”*. The authors also explain of a phenomenon of counter-performativity in which the utility of a valuation device is undermined because the objects of valuation resort to gaming, through deliberate effort to offset the “bad” effects of performativity and finally, through the unintended consequences of performativity.

Findings of this thesis suggest that performativity of the FVAF is effective but has the potential to fall under the category of being Barnesian or even counter-productive. At present the potential of the FVAF to exert Barnesian performativity is on one hand, promoted by actors that favour hard rankings to make investment decisions and on the other hand, controlled because of extant incentive structures which pay GPs carried interest based on realized performance. Barnesian performativity, for example, may be promoted through the work of investment consultants that create “structured offerings” for private equity investors. To explain, several investment consultants make attempts at ranking GPs through the aggregation of return realized and unrealized return data. If investors begin allocating capital strictly based on these rankings, such can induce behavioural change in the GPs by compelling them to find ways to rank higher such as by making investments that they can write up quickly. However, what controls for such form of behaviour is that GPs are rewarded handsomely for cash performance. Under a European carried interest model, a GP is entitled to 20% of all the profits once the fund has returned aggregate cash flows equivalent to a preferred return of 8% calculated on capital contributions. The carried interest, therefore, forms a strong incentive for GPs to outperform and distribute cash to investors versus spending time on “managing” fair valuations to secure further streams of management fees.

There is also an intriguing case of counterproductivity of the FVAF that was discovered as part of this thesis. Huether (2018) explained that GPs are indeed partaking in a form of gaming and timing their fundraisings so they coincide with true high-performance estimates of successful deals. In such circumstances and quite ironically, the audits of these numbers could also have the effect of compounding the legitimacy of the GPs going out to fundraise. To reiterate some

of the findings of this thesis, there have been instances of errant GPs that market governance features such as the use of third-party valuation firms and audit by third-party auditors to improve investor confidence in reported numbers (Sec.gov, 2013).

Opaqueness and arbitrage opportunities

Morgan Stanley reports that the private equity industry is set to grow to US\$12.5 trillion by 2025 (Baer, 2022). McKinsey and Company (2022) describes such growth as private equity having “*graduated from the fringes of the economy to the mainstream*”. An article by the Wall Street Journal provides an interesting perspective on the matter of private equity’s raised “systemic importance”: if these companies do not need to disclose as much information about their operations vis-à-vis their listed peers, this makes a bigger segment of the economy less transparent (Baer, 2022). This narrative is also discovered in some of the findings of this thesis - Norway’s finance ministry blamed opaqueness as one of the reasons to not invest in private equity (Whyte, 2018), and many investors blaming a lack of transparency as well as weak standards of accounting and audit controls as barriers to entry (Mooney, 2016; State Street, 2021)

This is a particularly confuzzling narrative and a red herring. The findings of this thesis suggest that the introduction of the FVAF has opened up the industry. One possible reason why the industry still carries a reputation for ‘opaqueness’ may be because information on private equity is not accessible to the public. This is deliberate: this thesis finds that GPs do not want the public to have knowledge of the developments of their portfolio companies as this is what provides private equity with its competitive edge. What maybe further contributing to the perception of opaqueness amongst investor’s maybe due to performance interpretation in private equity being difficult to harness. Lerner (2022) describes this process of knowledge amalgamation to take years:

“When we look at the performance of limited partner investors, we see a strong temporal trend. The longer you’ve had a private equity program, the better your returns. Private markets are not an area where you can just go from zero to 60 miles per hour overnight. You have to look at it as a longer run kind of process. Second, you really need to build relationships and understand the lay of the land. Too often we see investors taking shortcuts, investing with fund-of-funds, or investing in the biggest name-brand funds.

These aren't necessarily bad decisions, but there is no real substitute for building a variety of relationships, digging in to understand different market segments, and developing that experience. This process isn't easy, but it rewards those who spend time developing relationships, visiting groups, and understanding them."

The above findings beckon the question, "How can policymakers help investors with their private equity programmes?" Take for example the regulatory warning that says, "*past performance is not indicative of future results*" added to a track record slide. It adds little to the evaluation of a private equity investment. What maybe more interesting for a private equity investor is that performance is sticky in private equity funds, although persistence weakens over time, and this is what contrasts private equity performance from that of mutual funds or hedge funds where there is no persistence in manager performance from quarter to quarter (Lerner, 2022). There are other interesting findings concerning private equity performance as well as GP behaviour that could help an investor improve their private equity programme:

- Cambridge Associates explains that most funds take at least six years to settle into their final quartile ranking and typically rank in 2-3 other quartiles prior to its final settling. *Should similar risk warnings accompany benchmarking slides included in PPMs?*
- As highlighted earlier, Professor Niklas Huether (2018) from the Indiana University's Kelley School of Business in his paper "Raising Funds on Performance: Are Private Equity Returns Too Good to Be True", offers the perspective that private equity firms time their fundraising activities so they coincide with "true high-performance estimates of successful deals, while this performance cannot be systematically repeated in later deals". *Should investors be more aware that fair values for private equity are influenced by fundraising activities **but** also vice versa?*
- Zider (1998) describes the risks of investing in early-stage companies, explaining that it is difficult to separate the winners from the losers because the growth rates "look strikingly similar". This could manifest yet another "Disneyland" effect where certain venture capitalist benchmark subprime investments to "shooting star" investments to justify high valuations. *Should track record slides for early-stage venture funds be accompanied with similar warnings?*

In this sense, there is scope for regulators to investigate the extent as to when and where such knowledge needs to be more ubiquitous to help investors with due diligence exercises.

Heterogeneity in private equity

An aspect of the private equity industry that is not strongly emphasized is the heterogeneity amongst private equity players. This form of heterogeneity gives rise to diverse business practices. In this thesis, it is explained that investors dealt with private equity's varied reporting practices by creating reporting templates to reduce an investor's cognitive load. In this example, such "standardization" could be lauded. However, this thesis also explains how a "one-size-fits-all" regulatory strategy of requiring all GPs to prepare independent fair valuation can penalize certain players that are not able to organize independent valuations internally. These GPs resort to paying fees to third-party firms to comply with these requirements. This is ironic because, on one hand, FVA is championed to level the playing field for capital market players (Wallison, 2009) and, on the other hand, the bureaucracy costs relating to FVAF can place smaller players at a relative disadvantage. This thesis also reports how Singapore's regulator, the MAS, has tried "re-levelling" the playing field by eliminating independent valuation requirements for venture capital players, leaving it up to the investors to make this decision. However, the catch is that these GPs can only market their offerings to institutional and accredited investors. Singapore's regulator has made use of "systems-thinking" to frame its regulatory strategy because certain features of the regulatory framework are expected to compensate when relaxing others.

Whilst the MAS has been deliberate about "re-levelling" the playing to address the comparative disadvantages of certain sub-categorises of private equity players, there could be other strategies such as offering subsidies, or perhaps introducing other forms of bespoke valuation devices for the venture capital industry that does not come attached with such a high price tag. For example, regulators could even do away with fair valuation accounting for very small managers and/or venture capital fund managers based on a small economic imprint and reliability issues of estimates for early-stage ventures respectively. All in all, it is important to consider a panorama of strategies and consider the positive impact of adopting a tailored / bifurcation/ trifurcation strategy.

The rise of neo-private equity finance and risk management functions

Fair value accounting has increased the complexity and administrative burden of monitoring and managing private equity portfolios in the hands of the investor. As described in this thesis,

“Calculating risk and return information for private equity needs to be managed carefully to account for time decay (fair values are reported 45 to 60 days after date of measurement) (Wall, 2009), low-frequency reporting (quarterly) (Wall, 2009), smoothing (Lerner, 2022), and possible manipulation (Jenkinson, Sousa and Stucke, 2013; Barber and Yasuda, 2017). As a result of the foregoing shortcomings, the ILPA recommends that investors avoid paying management fees and carried interest based on fund NAV (ILPA Principles 3.0, 2019). Furthermore, if alternative carried interest models, such as the use of the deal-by-deal carried interest model with interim clawbacks, are used then the ILPA recommends avoiding the use of fair values held higher than cost when calculating interim clawbacks on carried interest (ILPA Principles 3.0, 2019).”

All in all, it suffices to say that the introduction of the FVAF has invited a new form of professionalization to private equity finance functions. Those helming these roles are expected to have expertise in managing complex data, understanding valuation techniques for private markets as well as adopting unconventional risk management techniques to account for estimation uncertainty. Taken in entirety, regulators of today should take note of the growing field of private equity finance and risk management and the greater level of resources and as well sophistication required to structure, monitor, and manage private equity positions. In this regard, the views of former General Counsel of the SEC Brian Cartwright that amateur retail investors are at a disadvantage to professionals (Cartwright, 2007) continue to ring true today.

Regulators also need to continue to exercise vigilance and discernment especially in the context of misleading narratives of simplified monitoring made possible for private equity. As explained in this thesis, the FVAF is a pliable tool that relies on the actions and reactions of various actors to make it fit for use. Changing components of the institutional background alters the effectiveness of the product. In terms of the future of private equity, this finding is relevant and applicable with regards to attempts to democratize investments in private equity to include

the mom-and-pop investor as well as to structuring open-ended products that “invest” in fair values to accommodate trading activity.

[END]

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