

Louvain School of Management

Specificities of Luxembourg's private equity business

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Mr Robert Jarvis,	Adviser at Luxembourg for Finance
Mr Paul Junck,	Managing Director of LPEA
Mr Ravi Madhvani,	Principal Consultant of Funds Partnership
Mr Fabio Regis,	Adviser at Luxembourg for Finance
Mr Hans-Jürgen Schmitz,	Managing Partner of Mangrove
Mr Nick Tabone,	Partner, Private Equity Leader at Deloitte Luxembourg

Abstract

This study investigates the specificities of the Luxembourg environment in the context of the global private equity industry and the characteristics that will ensure its position as a private equity hub in the long term. Building up as a case study and adopting a qualitative approach, data was collected by conducting interviews with seven stakeholders of the Luxembourg private equity industry. The insights gained from the interviews together with the findings from the review of publications by financial organisations and consulting companies allowed to assess Luxembourg's position in the global ecosystem and to define the specific features of the country's private equity business. The subsequent SWOT analysis identifies main assets such as its stability, its active approach to externalities and its support of innovative businesses. The major weaknesses comprise the limited capacity of the country as well as its distance to investors and portfolio companies. If data were made accessible, further research might be recommended such as a sound quantitative study of the overall return, cost and risk of private equity firms in Luxembourg.

TABLE OF CONTENTS

INTRODUCTION.....	1
1 Research background	1
2 Problem definition.....	1
3 Aim and objectives.....	2
4 Methodology.....	2
5 Definition of private equity	4
6 Conclusion.....	5
PART 1: DESCRIPTION OF THE PRIVATE EQUITY BUSINESS.....	6
1 Introduction	6
2 Literature review	6
3 The private equity ecosystem.....	8
4 Investment types	10
5 The four phases of the lifecycle of a private equity fund	11
6 Expected revenues of the fund	13
7 Conclusion.....	15
PART 2: MACRO ENVIRONMENT.....	16
1 Introduction	16
2 Private equity in numbers	16
3 Relevant external factors	17
3.1 Alternative Investment Fund Managers Directive (AIFMD)	17
3.2 Brexit	21
3.3 Base Erosion and Profit Shifting (BEPS)	22
3.4 Common Reporting Standard (CRS)	23
PART 3: LUXEMBOURG ENVIRONMENT.....	24

VIII.

1	Introduction	24
2	General	24
3	Talent.....	25
4	Impact of the implementation of AIFMD into national law	26
5	Private Equity Investment Vehicles in Luxembourg	27
5.1	Part II UCI (Undertaking for Collective Investment)	28
5.2	Specialised Investment Fund (SIF).....	28
5.3	Investment company in risk capital (SICAR)	28
5.4	Reserved Alternative Investment Fund (RAIF)	28
5.5	Financial holding company (SOPARFI)	29
6	Legal form	30
7	Fund management	31
7.1	Tax treatment carried interest.....	31
PART 4: SWOT ANALYSIS		33
1	Introduction	33
2	Strengths.....	34
2.1	Stability	34
2.2	Pro-activity towards external environment.....	34
2.3	Broad spectrum of governance	35
2.4	Diversity and quality of the ecosystem	36
2.5	Multilingualism	37
3	Weaknesses	37
3.1	Distance to investors and portfolio companies	37
3.2	Taxation of carried interest.....	38
3.3	Limited capacity of Luxembourg.....	38
4	Opportunities.....	38
4.1	Substance requirements	38
4.2	Search for a reliable EU base for private equity firms.....	39
5	Threats	39
5.1	Instability of the European Union.....	39
5.2	Overregulation by the EU	40
PART 5: PROSPECTIVE FOR FUTURE TRENDS.....		41
1	Introduction	41

2	Expertise.....	41
3	Innovation.....	42
4	Adaptation to external environment	43
5	Conclusion.....	43
	CONCLUSION.....	44
	REFERENCES.....	I

List of abbreviations

AIF	Alternative Investment Fund
AIFM	Alternative Investment Fund Manager
AIFMD	Alternative Investment Fund Manager Directive
ALFI	Association of the Luxembourg Fund Industry
BCL	Central bank of Luxembourg (Banque Centrale du Luxembourg)
BEPS	Base Erosion and Profit Shifting
CRS	Common Reporting Standard
CSSF	Supervisory authority of the Luxembourg financial sector (Commission de Surveillance du Secteur Financier)
EU	European Union
EBITDA	Earnings Before Interests, Taxes, Depreciation and Amortization
FCP	Common investment fund (Fonds Commun de Placement)
GP	General Partner
LFF	Luxembourg For Finance
LP	Limited Partner
LPEA	Luxembourg Private Equity and Venture Capital Association
OECD	Organisation for Economic Co-operation and Development
RAIF	Reserved Alternative Investment Fund
SA	Public limited company (Société Anonyme)
Sàrl	Partnership limited by shares (Société à Responsabilité Limitée)
SCoSA	Co-operative in the form of a public limited company (Société Co-opérative organisée sous forme de Société Anonyme)
SCS	Limited partnership (Société en Commandite Simple)
SCSp	Special limited partnership (Société en Commandite Spéciale)
SICAR	Investment company in risk capital (Société d'Investissement en Capital à Risque)
SIF	Specialised Investment Fund
SOPARFI	Financial holding company (Société de Participations Financières)
UCI	Undertaking for Collective Investment
UCITS	Undertakings for Collective Investment in Transferable Securities

Introduction

1 Research background

Private equity emerged as a niche sector for investing but has known a tremendous growth, reaching its highest level of fundraising in Europe in 2016 amounting to € 74,5 billion. In today's environment with persistent low interest rates investors are searching for alternative ways to public markets to create value and obtain high returns (Espinoza, 2017). Companies on the other hand are struggling to find investments, as banks refrain from risky lending (Sunday Business Post, 2015). Moreover, with rising political instabilities and regulatory changes in many countries, firms operating in this cross-border industry are re-assessing their set-up and looking for a stable and safe environment with unrestricted access for their long-term investment funds (Coekelbergs, 2014).

Luxembourg has become a major player in the industry over the last decades, starting with providing unregulated vehicles that private equity firms used to structure the companies the fund is investing in. The country reacted to changes in the environment and regulations and became an important destination for fund creation and back offices. An increasing number of private equity houses installed offices in the Grand-Duchy, and currently ten out of the thirteen largest private equity houses worldwide have established an office in the country. Currently, the Grand-Duchy particularly aims to attract private equity houses to provide middle-office services from Luxembourg (Luxembourg Private Equity & Venture Capital Association [LPEA], 2016).

2 Problem definition

This research attempts to define how Luxembourg is positioned for private equity houses, the characteristics of the Grand Duchy's environment and how it can ensure the maintenance of its position as a private equity hub in the long term.

2.

3 Aim and objectives

To the author's best knowledge, no scientific research has investigated the specificities of the private equity business in Luxembourg. Therefore, the following research is defined by the following aim and objectives:

❖ Research Aim

The aim of this thesis is to explore the specificities of the Luxembourg environment in the context of the global private equity industry and the characteristics that can ensure its position as a private equity hub in the long term.

❖ Research Objectives

In order to achieve this aim the following objectives are set:

- Describe the private equity industry and examine the main macro environmental factors influencing its evolution.
- Examine the specificities of the Luxembourg private equity industry.
- Apply a SWOT analysis of the Grand Duchy's private equity industry.
- Determine the factors which could allow Luxembourg to remain a preferred destination for private equity firms in the long term.

4 Methodology

This exploratory study builds up as a case study and is of qualitative nature. The relevant sources explored in order to address the research question include predominantly publications of organisations of Luxembourg's financial sector, reports from consulting companies and service providers of the private equity industry. Due to the opaque character of the private equity business, it was essential to gather the opinions of professionals active in Luxembourg's private equity sector. For this purpose, six face-

to-face interviews and one phone interview were carried out. Table 1 shows the list of interviewees.

Name	Position	Company/Organisation	Date of Interview
Dan Arendt	Senior Advisory Partner	Castik Capital Partners	14 th June 2017
Robert Jarvis	Adviser	Luxembourg for Finance	6 th July 2017
Paul Junck	Managing Director	LPEA	2 nd May 2017
Ravi Madhvani	Principal Consultant	Funds Partnership	26 th July 2017
Fabio Regis	Adviser	Luxembourg for Finance	6 th July 2017
Hans-Jürgen Schmitz	Managing Partner	Mangrove	10 th July 2017
Nick Tabone	Partner Audit, Private Equity Leader	Deloitte Luxembourg	5 th July 2017

TABLE 1 – List of interviewees (Source: author)

Figure 1 depicts the various stages of this research.

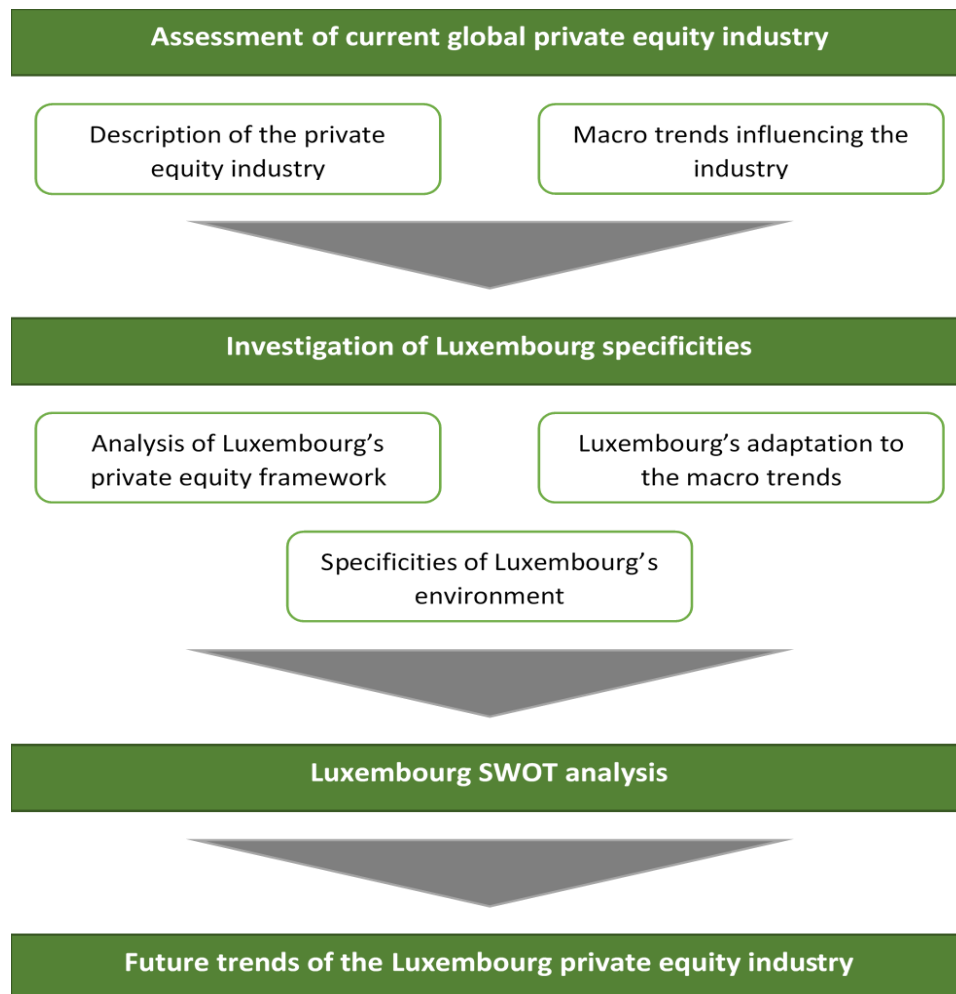


FIGURE 1 – Research stages (source: author)

5 Definition of private equity

Private equity belongs to the ‘alternative’ asset class, which is defined by a negation: it includes all assets that do not belong to the three primary classes: cash, bond and stocks (Leleux, Van Swaay, & Megally, 2015). There is no generally accepted definition of private equity and its activities can take different legal forms (Thomsen, 2009). As this thesis focuses on the Luxembourg environment, the following definition of private equity shall be considered throughout this thesis: “any investment in companies that are not listed on

any regular and open market and for which valuations are not readily available” (Association of the Luxembourg Fund Industry [ALFI], 2013a, p. 5).

A private equity fund buys controlling positions in the target companies for a medium or long-term period. The return of the investments is a direct function of the value that has been created in the portfolio companies (LPEA, 2016). While private equity funds are illiquid due to their long-term investment, their life span is finite and the funds will be dissolved after a certain number of years (Thomsen, 2009). This characteristic is primordial as it defines the private equity as a financial investment and distinguishes it from an industrial investment (Dziekoński & Ignatiuk, 2016).

From the perspective of the target companies, private equity is an alternative equity financing to the traditional stock market or bank lending sources (CACEIS, 2010). The target companies aim to achieve growth due to the financial support and strategic advice they will receive from the private equity firm (Dziekoński & Ignatiuk, 2016).

6 Conclusion

This introduction provided the reader with the research background. The problem definition and aim of the thesis are presented and linked to the objectives. The first part of this thesis will discuss the literature review and provide an overview of the private equity business.

Part 1: Description of the private equity business

1 Introduction

In order to obtain an overview of the private equity business, it is essential to analyse the subjects the different researches have already investigated. In addition to the analysis of the global and Luxembourg macro environment of the private equity business, it is primordial to gain a deep insight in the different parties involved and the functioning of the business, and to research the existing literature.

2 Literature review

Despite the tremendous growth of the Private Equity business worldwide, the research about this industry is still limited.

Most researcher underlined the higher performance of private equity funds compared to retail funds (Harris, Jenkinson, & Kaplan, 2014; Kaplan & Schoar, 2005; Leleux et al., 2015). In order to obtain this performance, an intense investment in time, labour and talent of the fund managers are required (Blackstone, 2017). Moreover, researchers confirmed that part of the higher yield is due to the illiquidity factor of the fund and an uncertainty of the elapsed time between the date where an investor commits his capital and when it is actually called and used for investment (Harris et al., 2014).

However, multiple researchers made a more critical analysis of this premium, arguing that the performance reports of private equity are biased due to limited reporting requirements and therefore relying largely on voluntary reporting. (Blackstone, 2017; Leleux et al., 2015).

As the Private Equity has grown vastly and become more complex, most researchers have specialized and explored a sub-segment:

Several researchers discussed the alignment of interests between general partners and limited partners in private equity. The remuneration scheme in place is not giving the correct mechanism to always give fund managers the incentive to act in the investors' best interest (Fleischer, 2005; Shobe, 2016).

Moreover, regulations have been increasingly in the focus of researchers, analysing the different kind of regulations, comparing different degrees of regulation between countries and its effects on the evolution of the private equity industry (Hernandez, 2012; Thomsen, 2009; Vermeulen & McCahery, 2010). Vermeulen, McCahery and Hernandez (2012) underlined the benefits of self-regulation but also argued that co-regulation may induce effective compliance when self-regulation fails. They assessed that the regulatory framework in Europe before the Alternative Investment Fund Managers Directive (AIFMD) was adequate to support growth and limit market abuse. Hernandez (2012) argued that the enlarged regulation with AIFMD puts Europe at a disadvantage compared to the United States and Canada, making its market less attractive.

Two recent researches undertook a qualitative analysis of the attractiveness of countries for private equity, using index measures such as economic activity, entrepreneurial culture and deal opportunities. They analysed the attractiveness of the countries for investors to find investment opportunities in the respective country (Groh, Liechtenstein, Lieser, & Biesinger, 2016; Marasová, Čulková, & Bittner, 2017). The United States ranked first worldwide and the United Kingdom second. Luxembourg placed 30th globally, with an attractiveness score that is under the Western Europe average. However, the researches underlined a main issue in their research. The different indexes used for the analysis are not equally important in the different countries and would often be weighed differently, if the analysis focused on a single country (Groh et al., 2016).

The review of the literature revealed that no research has analysed yet the attractiveness for private equity firms to implement their offices in a certain country. In addition, no academic research has assessed the private equity business in Luxembourg. The following study will attempt to fill this literature gap.

3 The private equity ecosystem

The ecosystem around the private equity fund involves multiple actors: the limited partners invest their capital; the general partner creates the fund and the alternative investment fund manager (AIFM) is either the general partner or an externally appointed manager. All the other actors, except the auditor, are service providers and appointed if the private equity firm wants to externalise certain tasks. Moreover, the AIFM, the auditor, the central administration, the depositary and custodian and the domiciliary agent are controlled by a national supervisor. The fund itself may also have to be supervised, depending on the vehicle chosen. Figure 2 illustrates the private equity ecosystem in the EU.

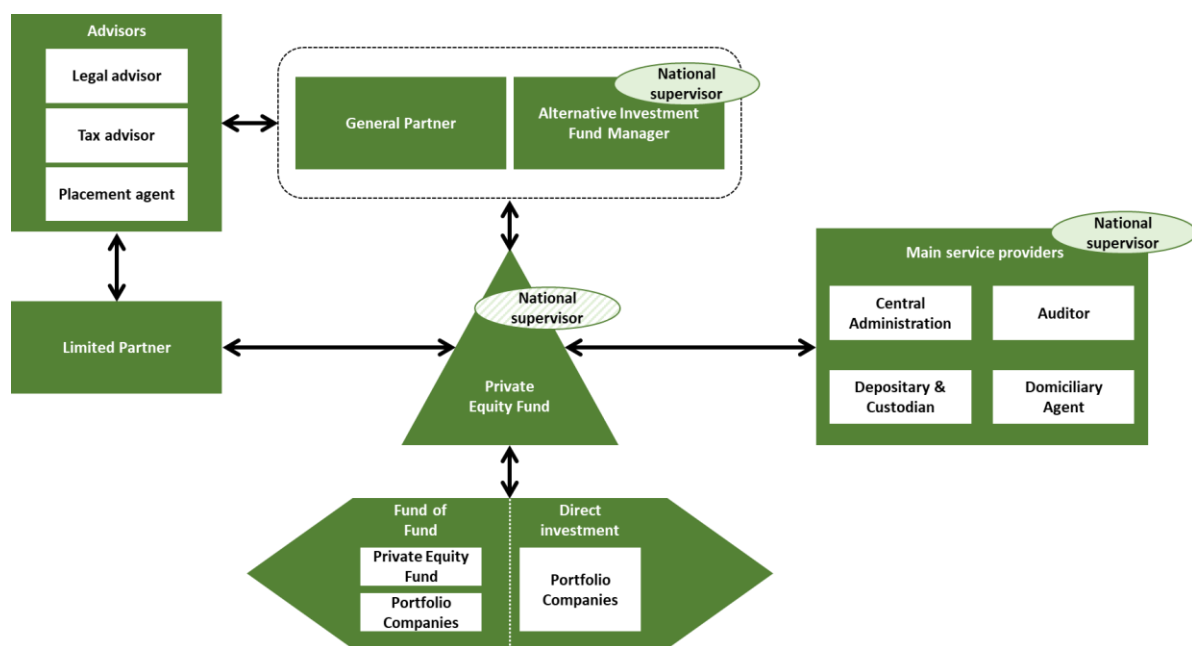


FIGURE 2 – Private equity ecosystem in the EU (ALFI, 2013a; Deloitte 2017)

❖ **General partner**

The general partner refers to the private equity firm as an entity. It works as an interface between the limited partners and the target companies. It raises the capital from investors and makes the investment decisions (Deloitte, 2017). The private equity firm does not invest directly in the portfolio companies but creates a fund consisting of different companies (ALFI, 2013a). The general partner has the legal responsibility to manage the fund. Contrary to limited partners, the general partner has theoretically unlimited personal liability (Deloitte, 2017). In order to ensure alignment of interest, the general partner is usually asked to invest a certain percentage of its own capital in the fund (Leleux et al., 2015, p. 46). It receives a fixed annual remuneration due to the management fee charged to the limited partners. The carried interest given to the general partners is variable and depends on the return of the fund (CACEIS, 2010).

❖ **AIFM**

The AIFM can either be the general partner or an external entity. His responsibilities are defined in a contract of agreement (ALFI, 2013a). In the European Union under the AIFM directive, the key functions to be performed by a fund manager are portfolio management and risk management (Frequently Asked Questions CSSF of 6 July 2017, 2017). He is remunerated due to a predetermined management fee charged to the investors (ALFI, 2013a; Deloitte, 2017).

❖ **Limited partners**

The limited partners are investors who subscribe to interests in the fund. They are committed to contribute a specific amount of money when required by the fund. (Shobe, 2016). They can be private investors, institutional investors (for example insurance companies, credit institutes, pension funds or university endowments) or fund of funds. A smaller percentage of limited partners is formed by the public sector and the equity market. The limited partners invest in these highly risky funds with the goal to obtain a high return on their invested capital after the end of the lifetime of the fund (Bayaz, 2014).

Certain unregulated fund structures are only opened to well-informed investors. According to the Luxembourg law, institutional and professional investors have the status of well-informed investors by default. An investor can also be qualified as well-informed if it meets the following two conditions:

1. The investor gives a written confirmation that it “adheres to the status of well-informed investor” (Circular CSSF 07/283, 2007, p.2).
2. Either it invests at least EUR 125 000 in the fund restricted to well-informed investors or it has been assessed by a credit institution, a management company or an investment firm that confirms that the investor has a sufficient level of expertise, experience and knowledge to invest in this kind of fund (Circular CSSF 07/283, 2007).

❖ **Service providers**

External service providers are often chosen to advise the fund managers and/or to externalise certain tasks. The placement agent and the tax and legal advisors provide services to the general partner as well as to the limited partners. Other main service providers include auditors (mandatory), depositary and custodian, administrative agents and domiciliary agents (CACEIS, 2010).

4 Investment types

There exist three major investment types in private equity: angel investing, venture capital and buyout deals:

- ❖ **Angel Investing** generally takes place in an informal market. High-net worth individuals hear the news of fledgling companies with a feasible business. These companies have not yet established a concrete business plan or prototype. Investors rarely control the daily business of these companies but may provide advice during critical phases. The investors often require large equity stakes or

convertible debt securities to compensate for the high risk of the investment (Cendrowski, Martin, Petro, & Wadecki, 2012)..

- ❖ **Venture capital** is used to invest in target companies that can be already developed at different stages: the company may be of the same type as for angel investing, but the investee company has already developed a clear concept of its business plan and thus the company has statistically more chances of succeeding. Investors' capital is used for further research and development of the business idea or to recruit the necessary management. Venture capital may also be invested in firms that already developed a concrete business plan and are ready to start the business. The investee needs financing to build manufacturing plants or to create the necessary inventory. Finally, venture capital can also be invested in a firm that is already developed and making profits. However, as banks have become increasingly reluctant to grant loans, the investee company benefits from venture capital to finance a fast-growing business beyond its available working capital. Generally, in order to limit investors' downside risk, venture capital is often committed in stages: a firm has to hit a predefined milestone before being granted further financing (Cendrowski, Martin, Petro, & Wadecki, 2012)..
- ❖ **Buyout deals** invest in major companies with strong returns in the past but that are facing a downturn due to poor management or a difficult market environment. The investment is used to restructure the company with the goal of increasing its returns. This type of investment is often done in the form of a leveraged buyout, using large amounts of debt (Cendrowski, Martin, Petro, & Wadecki, 2012).

5 **The four phases of the lifecycle of a private equity fund**

Over its lifetime the fund passes through four main phases:

1. During the **fundraising**, investors commit capital to their fund. This capital does not need to be paid immediately to the private equity fund. However, the investors

commit to provide this capital once the portfolio companies the fund will invest in are defined (Baldi, 2013).

2. During the **investment** phase, the private equity firm searches for opportunities, analyses them and finally invests in the chosen portfolio companies. At this stage, the general partner will also issue a capital call where the investors have to provide the needed capital. The committed capital is generally not called at once but the general partner makes several capital calls over the phase, as the different investee companies are chosen. The fund created focuses generally on a specific area. Its companies are constant in at least two of these parameters: geography, industry, stage (Baldi, 2013).
3. During the **active management** of the portfolio companies, strategic and managerial actions are applied to improve their performance (Baldi, 2013). The active management aims to increase the value of the target companies over the holding period (Payne, 2011). In the last phase, the majority equity stake of the different companies is divested by trade sale, an initial public offering or a secondary buyout. In general, the lifetime of a private equity fund is around ten years, with the possibility to extend its duration with a grace period up to four years, provided that the investors agree (Baldi, 2013).
4. During the **divestment**, the majority equity stake of the different companies is divested by trade sale, an initial public offering or a secondary buyout. In general, the lifetime of a private equity fund is around ten years, with the possibility to extend its duration with a grace period up to four years, provided that the investors agree (Baldi, 2013).

6 Expected revenues of the fund

❖ Management fees

Management fees are the fixed income accruing to the general partner. They are paid to the general partner and cover the ordinary expenses arising due to the management of the fund. They are calculated as “a function of fee level, fee basis, committed capital, net invested capital and the establishment costs of the fund” (Metrick & Yasuda, 2010, p. 2315). Four methodologies may be used to assess the amount of management fees: The first consists of a constant ongoing fee determined as a percentage of committed capital. The second is also calculated based on the committed capital but a decreasing fee schedule is applied over the years of the fund. A third method consists of applying a constant rate to the committed capital in the first years and to the invested capital in the following years. This method ensures that the general partner receives less compensation in case the fund does not invest the entire committed capital of the investors and therefore intends to ensure alignment of interests. A last method consists of a combination of decreasing the fee schedule with a change in the basis used for the calculation of the management fee. The payable management fee during the post-investment phase is lower than for the other three methods (Baldi, 2013).

❖ Carried interests

The most important part of the remuneration is assured by the carried interest and varies depending on the performance of the fund. It is generally fixed at 20% of gross capital gains. Two payment systems of the carry interest can be distinguished: ‘deal-by-deal’ and ‘fund as a whole’. The first system pays the carried interest on an on-going basis and is determined by a fixed percentage of the capital gain of a specific deal. This includes clawback provisions that require a return of the excess carried interest that the general partner has received, if the return of the following exits is not sufficient to return the invested capital to limited partners. The second system calculates carried interests on the accumulated gross capital gains of the fund over the entire lifetime of the fund (Baldi,

2013). This European model of waterfall distribution has become the standard for private equity funds, independent of the location of the fund. This method considers the overall performance of the fund over its entire lifespan. It therefore rewards the patience of the general partner, encourages it to pursue a long-term view and ensures that limited partners are always getting their part of the return first (Tyne, 2016). Its waterfall distribution is settled in the following order:

1. The amount of called capital to be invested in the portfolio companies over the lifetime of the fund is paid back to the investors.
2. Before the return is being split between the general partner and the limited partners, investors receive a risk-adjusted return on the share of gross capital not paid out to general partners. This carry hurdle represents the opportunity cost of capital and is generally equal to 8%.
3. Once the minimal threshold of reimbursing for the investors is reached, they will generally receive 80% of capital gains realised by the private equity fund and the general partner will receive 20% (Baldi, 2013). In order to ensure this ratio, the general partner will receive a catch-up provision until profits are split according to the defined percentage (CACEIS, 2010). Figure 3 illustrates the waterfall distribution.

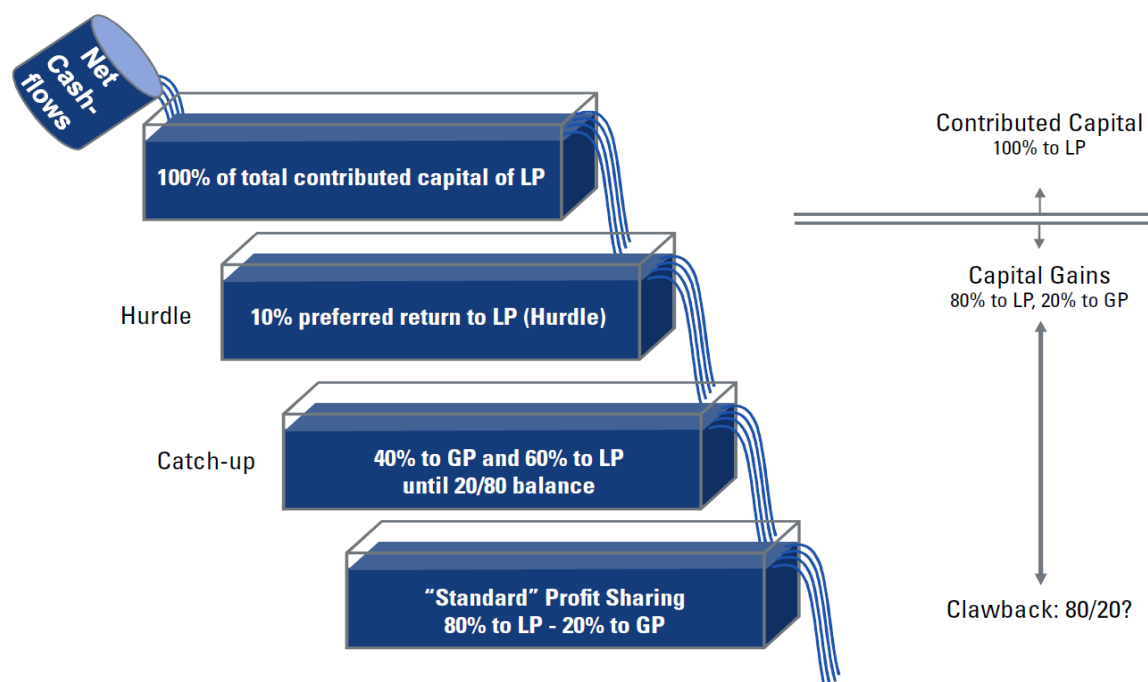


FIGURE 3 – Distribution waterfall (Source: CACEIS, 2010)

7 Conclusion

The first part of the thesis described the private equity business, its different actors, the main investment types and stages as well as the revenue distribution of private equity funds. It provided the required knowledge in order to assess how the private equity business is impacted by the macro environment.

Part 2: Macro environment

1 Introduction

This part of the thesis will give an overview of the global volumes of private equity and current external factors that have a significant influence on the business of private equity firms. The factors relevant for the evolution of private equity have been identified thank to the interviews as well as to recent publications from consulting companies and Luxembourg financial associations.

2 Private equity in numbers

As of 2016, private equity had USD 2,49 trillion assets under management worldwide, which presents an all-time high (Preqin, 2017b). Luxembourg had EUR 300 billion assets under management, 12% of the global total (LPEA, 2016). However, dry powder (amount raised by private equity firms but not yet invested) sharply increased globally from USD 755 billion in 2015 to USD 820 billion in 2016 (Preqin, 2017a). Moreover, fund managers are struggling to craft deals. This is due to the high purchase prices of target companies, with an acquisition multiple being 10 times the EBITDA¹. The global fundraising from investors remained stable with USD 589 billion worldwide. This reflects a disequilibrium between offer and demand: There is a high demand from investors for private equity deals but the global level of dry powder and the high prices of the deals reflect a surplus in demand.

The size of the funds created is at an all-time high, with experienced fund managers closing funds that are 45% bigger than 2010. A quarter of the capital raised was invested in the ten largest funds in 2016. With 11 mega buyout deals (> USD 5 billion) the year 2016 clearly experienced a surge. It has been the highest number of mega buyout deals since 2009.

¹ EBITDA = Earnings before interests, taxes, depreciation and amortization

Regarding the amount of debt used to finance the deals, the funds are still highly leveraged, presenting a Debt/EBITDA² multiple of 5,3 in the United States and 4,8 in Europe (Bain & Company, 2017).

3 Relevant external factors

It is key for a small financial centre specialising in certain services to be able to adapt to global regulations and conditions (Walther, Schulz, & Dörry, 2011). This is why, in order to assess the private equity industry in Luxembourg, it is crucial to list the most essential factors influencing the industry in Luxembourg.

3.1 Alternative Investment Fund Managers Directive (AIFMD)

In 2011, the European Union released a directive regulating the AIFM with the aim to provide regulatory and supervisory framework for the activities of all AIFMs within the EU. According to Directive 2011/61/EU (2011) AIFM's strategies are "vulnerable to some or several important risks in relation to investors, other market participants and markets".

The directive defining this passport regime had to be transposed into the law of the member countries of the European Union. Figure 4 depicts the application of AIFMD.

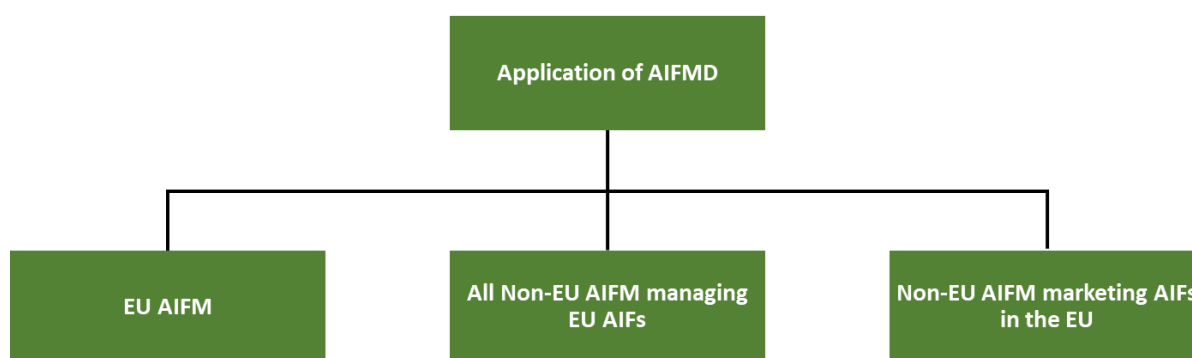


FIGURE 4 – Application of AIFMD (Source: author)

² EBITDA = Earnings before interests, taxes, depreciation and amortization

The directive is applicable to:

- all EU AIFMs, whether they manage EU Alternative Investment Funds (AIFs) or non-EU AIFMs, independent of the fact whether they are marketed or not in the EU;
- all non-EU AIFMs managing EU AIFs, independent of the fact whether they are marketed or not in the EU;
- all non-EU AIFMs marketing EU AIFs or non-EU AIFs in the European Union. For non-EU AIFMs marketing non-EU AIFs, the country's existing private placement regime will remain available until at least 2018 (PwC, 2012).

The Directive 2011/61/EU (2011) provides a lighter registration and reporting regime applies to AIFMs if they manage in total under EUR 100 million of AIFs or if they manage only unleveraged AIFs where investors don't benefit from a redemption right the first five years and the cumulative total is under EUR 500 million.

Multiple substance requirements arise for private equity managers:

- ❖ **The key functions of the AIFMs** foreseen by Directive 2011/61/EU (2011) are portfolio management and risk management. It can additionally perform other tasks, such as fund administration and marketing. The AIFM can delegate some of his functions if he notifies the regulator and discloses it appropriately (Elvinger, Gaston-Braud, & Kuske, 2015). He may also delegate portfolio management and risk management as long as they are not both delegated entirely at the same time. Otherwise the supervisory authority may qualify the fund manager as a letter-box entity (Linklaters, 2013). An AIFM is considered a letter box and no longer considered the manager of the fund if the delegated internal management functions are substantially exceeding the functions performed by the AIFM itself (Renner, Moulla, & Schwabe, 2012). It must thus keep the needed expertise and resources to supervise the tasks it delegates and manage the risks associated to it (PwC, 2012).

- ❖ Directive 2011/61/EU (2011) states that **capital requirements** increase for both internal and external fund managers. In addition, the AIFM must take the necessary provisions to identify, manage, prevent and monitor conflicts of interest that may arise and damage the interests of the fund or the investors.
- ❖ Regarding the **risk management**, the AIFM must implement an adequate management policy covering all types of risk, such as operational risk, market risk, counterparty risk and liquidity risk (D'Anterrosches, 2017). The risk management function must be independent of the portfolio management and thus procedures and controls of liquidity have to be implemented (PwC, 2012).
- ❖ Remuneration of all AIFM's staff is subject to **risk-adjustment**. At least 40% of variable remuneration must be deferred over a minimum of three years. This requirement can in some cases increase up to 60%. A minimum of 50% of this variable remuneration must also be paid in units or shares (Hernandez, 2012).
- ❖ Another provision requires private equity managers to set reasonable **leverage limits** and prove that it complies with those limits at all times. It must report this information to the regulator as well as to its investors periodically (PwC, 2012).
- ❖ Moreover, **independent valuations** of assets under management need to be carried at least once a year (D'Anterrosches, 2017). Adequate and consistent procedures must be established to stay compliant (Payne, 2011). The firms will need infrastructure to carry out the valuation functions independently of the portfolio management (PwC, 2012).

- ❖ The AIFMD also imposes restrictions on **asset stripping**³. According to the Directive 2011/61/EU (2011) private equity managers are not “allowed to facilitate, support or instruct any distribution, capital reduction, share redemption and/or acquisition on own shares by such companies” during two years. Small and medium sized entities are excluded from this restriction (PwC, 2012).
- ❖ In terms of **transparency**, the Directive requires disclosures in the annual report of the AIF and disclosure to investors both before they invest and periodically during the lifetime of the fund (PwC, 2012). The information required increases significantly: it covers inter alia information on the people conducting the business, on the identities of the AIFM’s shareholders, on the remuneration policy and on the investment strategies (Arendt & Medernach, 2016).
- ❖ The **depository requirements** of the AIFMD correspond to those already in effect in Luxembourg before the implementation but its responsibilities are redefined and thus the agreements have to be redrafted (PwC, 2012). Next to safekeeping the assets in the fund, AIFMs must establish consistent and adequate procedures for the valuation of the assets under management (Payne, 2011). The impact of this regulation for market participants in Luxembourg is low.
- ❖ Lastly, under AIFMD, **data protection requirements** increase. AIFMs thus need to possess sound IT infrastructure to ensure the protection of confidential data (D'Anterrockes, 2017).

In order to upgrade its procedures and processes to be compliant to AIFMD, the AIFM face significant one-time costs. In addition, it faces higher ongoing maintenance costs to stay compliant with the requirements (Coekelbergs, 2015).

Despite these negative consequences for EU fund managers, Clarkson, Jaeklin and Kaczmariski (2014) argued that the AIFMD increased the attractiveness of Europe as an

³ Asset stripping is performed when one acquires a company with the purpose to sell off its assets with a profit (PwC, 2012)

onshore domicile. The directive creates an EU-wide passport that allows EU AIFMs to market authorised funds across Europe. Even though the directive increases the cost for private equity firms, the majority of firms wanted to benefit from the AIFMD, which led to an increase of market participants.

Non-EU AIFMs without a significant investor base in the EU base opted in a wide range for co-domiciliation. The original fund is kept in the offshore jurisdiction and a third-party AIFM platform operates a regulated parallel fund in the EU.

The Directive 2011/61/EU (2011) anticipated a review of the AIFMD no later than 22 June 2017. However, the European Parliament and the Council have not yet made any publications, and two interviewees confirmed that the market doesn't anticipate any review to be published before 2018.

3.2 Brexit

On 23 June 2016, the British people voted against a remaining of the United Kingdom in the European Union. The European Union is currently discussing the strategic approach to take regarding this decision. Either the EU denies the United Kingdom the access to the internal market if the UK does not accept deals similar to those in place for Norway or Switzerland, or the EU accommodates to the requests of the country and thereby ensures that several European industries will not suffer the consequences of being denied free access to this important market (Felbermayr, 2016).

Invest Europe (2017) underlined the importance of adequate agreements between EU27⁴ and the UK for private equity, as it is a cross-border industry: the fund manager, the investors and the target companies are most often in three different jurisdictions and it is crucial for investors to have access to their preferred fund manager, independent of its location.

⁴ EU27 theoretically represents the EU from 2007-2013, before Croatia became a member state. However, it is now commonly used to refer to the European Union after the exit of the United Kingdom, thus counting 27-member states.

The market uncertainty that comes with Brexit has an indirect impact on private equity funds. As firms want to ensure to be able to market their funds within Europe after the Brexit, some firms decided to locate their offices inside EU27. As private equity funds are long-term investments, the decision of the location has to be taken considering the long-term conditions of that country. Many UK based funds have been raised in the EU27 and in Euro since the Brexit vote (M. Wright, Wilson, Gilligan, Bacon, & Amess, 2016).

The EU leaders decided to take united decisions regarding Brexit. The 27 remaining member states will not decide individually regarding the approach to take related to Brexit but they will act jointly (Wishart, 2017).

3.3 Base Erosion and Profit Shifting (BEPS)

“BEPS refers to tax planning strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations where there is little or no economic activity” (Organisation for Economic Co-operation and Development [OECD], 2017, para. 2). More than 100 countries and jurisdictions developed an inclusive framework with 15 actions to address tax avoidance. Those actions are based on three core principles: coherence to avoid non-taxation, transparency between tax payers, tax administrators and among tax administrators, align taxation with substance to prevent double taxation⁵ (Deloitte, 2016c). Private equity is particularly affected by the following actions:

- ❖ **Action 2** concerns the different characterisation of entities and between jurisdictions. The measure aims to avoid that international companies exploit these mismatches in tax treatments to lower their tax burden (Deloitte, 2016c).

⁵ Double taxation occurs when the same financial assets are subject to taxation at two different levels, often in 2 different countries. Double taxation treaties exist between countries to offset a tax paid in one country against its liability in the country of residence (Palmer, 2008). Luxembourg has signed double tax treaties with 81 countries and is in negotiation with 16 countries (as of 23 July 2017) (Administration des contributions directes, 2017b).

- ❖ **Action 4** is relevant for private equity as it wants to prevent excessive deductible interests. It may thus impact the debt financing of portfolio company acquisitions (PwC, 2016).
- ❖ **Action 6** aims to prevent countries from granting treaty benefits in inappropriate circumstances (Deloitte, 2016a).
- ❖ **Action 7** changes the definition of permanent establishment for companies. Private equity is a cross-border industry and the firms operate globally either through advisory companies or through employees that frequently travel to the locations. Frequently neither the fund nor the manager have a permanent presence in the different jurisdictions. However, action 7 aims to restrain the artificial avoidance of permanent establishment status in certain locations and thereby may change the source country of tax payments for private equity managers and firms (PwC, 2016).

3.4 Common Reporting Standard (CRS)

CRS was developed with the aim of a global tax transparency and a co-operation in tax matters between countries. It increases the reporting requirements for private equity firms and a disclosure of the controlling people in financial institutions. Its main challenges are to stay compliant at all times with CRS, as legislations change and new jurisdictions are added to the CRS (Dewar, 2016). Over 100 countries have currently agreed to implement CRS. Luxembourg, the United Kingdom, Guernsey and Cayman Islands are early adopters and have to complete its first CRS in 2017 (Ocorian, 2017).

Part 3: Luxembourg environment

1 Introduction

The following part will analyse Luxembourg's general financial and political environment as well as specificities regarding the private equity sector.

2 General

Luxembourg is a European capital with political and economic stability. Even though it was affected by the financial crisis in 2008, it still possesses an extraordinary high standard of living and a growth of GDP of 4,2% in 2016 which is expected to remain stable in 2017. It was reconfirmed a triple A rating in 2017 by Standard & Poor's, Moody's and Fitch. Moody's (Moody's, 2017) justified this rating with Luxembourg's economic growth that exceeds other Euro countries, its sound and transparent institutions and its high fiscal strength. Moreover, its political stability makes it attractive for long term fund. Even in case of a change of government, like in 2013, the political parties coexist and agree on key issues. The coalition continued the initiatives on economic policies the former government had taken. It benefits from the European passport that enables its funds to be traded and marketed all over the EU.

Luxembourg might be defined as a small specialised financial centre which serves "distinct and highly competitive functions to meet the needs of global firms and the associated business milieu" (Hesse, 2014, p. 614). The centre "has developed a limited number of financial products and services at the global level" (Walther et al., 2011, p. 128). While it is well-known for being one of the leading private banking centres, it has expanded its private equity business, being the second largest private equity fund centre in the world, behind the United States (ALFI, 2017a).

Luxembourg currently ranks third in the world for talent competitiveness. With its welcoming environment, it aims to attract highly-qualified talents. In order help

businesses attract highly-qualified people and specialists, the Luxembourg state supports the businesses and employees by granting certain tax advantages related to the cost of moving as well as to housing, school fees, travel expenses and expenses of tax equalisation (LFF, 2011).

It characterizes by a supportive business-friendly political environment aiming to attract international businesses in order to support its economic growth. Moreover, Hesse (2014) stated that it has unparalleled international network relations, given the small size of the country.

The country is multicultural with 47% of foreigners from 170 different nationalities and an average of 3,6 languages spoken (LFF, n.d.). Moreover, compared to any other country in the European Union, Luxembourg is the only one permitting to submit legal documents regarding the creation of funds in either German, French or English. Thus, there is no need to translate those documents which favours the accessibility of the market.

3 Talent

An irreplaceable source of return are the skills of the private equity team (Blackstone, 2017). In addition, all interviewees agreed that finding talented people for the private equity extends to the other sectors related to the industry (lawyers, advisors, etc.) and is essential to develop the business in Luxembourg. Statistics show that the share of immigrants with tertiary-education increased by more than 10% between 1997 and 2007 (Peroni, Riillo, & Sarracino, 2016). However, there was no general consensus between interviewees on the offer of the right profiles. While one interviewee stated that most profiles private equity firms look for can be found in Luxembourg, two other interview partners mentioned that most employees have to be recruited from abroad because there is not enough offer in the country.

Walther et al. (2011) stated that the Luxembourg financial industry benefits from a skilled labour supply with easy access. However, both the authors as well as some interviewees stated that the market has a shortage of experienced talents. Nevertheless Walther et al. (2011) stated that recruitment has become easier for young and motivated graduates who are attracted by the reputation of Luxembourg as a specialised financial centre. This information was confirmed by one interview partner, who pointed out that as of now it is most often possible to hire the employees needed directly from Luxembourg.

4 Impact of the implementation of AIFMD into national law

Luxembourg transposed the AIFM directive in the Mémorial A n°119 on 12 July 2013 (Frequently Asked Questions CSSF of 6 July 2017, 2013). The following aspects have a specific impact on private equity firms in Luxembourg:

❖ Risk management

According to PwC (2012), the requirements of risk management have a medium impact on private equity firms. Procedures and controls of liquidity have to be implemented. These are however already largely in place in private equity firms in Luxembourg and frequently only require them formalisation in order to become compliant. Therefore, the impact is estimated to be medium (PwC, 2012).

❖ Valuation requirements

Many private equity managers carry out the valuation themselves in Luxembourg. With AIFMD they will have to prove that the valuation is performed in independence from portfolio management. This requirement will have a higher cost impact on smaller than on larger firms, since they do not yet possess the needed infrastructure (PwC, 2012).

❖ Asset stripping:

The impact of Luxembourg private equity firms is regarded as small as the restrictions mainly affect funds with distressed or turnaround strategies and limited buyouts. Only a limited number of AIFs fall under this provision (PwC, 2012).

5 Private Equity Investment Vehicles in Luxembourg

Luxembourg offers a diversity of investment vehicles the private equity firms can choose among in order to meet the requirements of its investors. Table 2 shows an overview of the characteristics of the different fund structures.

	Regulated fund			Unregulated fund	
	UCI Part II	SIF	SICAR	RAIF	SOPARFI
Structure	SA, SARL, SCA, SCS, SCSp	SA, SARL, SCA, SCS, SCSp, SCoSA, FCP	SA, SARL, SCA, SCS, SCSp, SCoSA	SA, SARL, SCA, SCS, SCSp, SCoSA, FCP	SA, SARL, SCA
EU Passport	No	Yes	Yes	Yes	Yes
Maximum risk exposure	20%	30%	Unlimited	Unlimited	Unlimited
Investors	No restriction	Only well-informed investors	Only well-informed investors	Only well-informed investors	No restriction

TABLE 2 – Overview of the diversity of vehicles for private equity in Luxembourg
(Source: LFF, 2012a, 2012b, 2015a, 2015b, 2016; Elvinger Hoss Prussen, 2016, 2017a, 2017b)

The capability to develop a simple legal and regulatory environment that enhances the development of new products is key for specialised international centres and is the most widely perceived advantage of doing business in Luxembourg. The following paragraphs will therefore analyse the legal structures that Luxembourg offers for private equity funds as well as for general partners (Walther et al., 2011).

5.1 Part II UCI (Undertaking for Collective Investment)

UCIs are governed by Part II of the Luxembourg Law of 17 December 2010 and can either be set up as common contractual fund or as an open-ended investment company. They are subject to prior approval and ongoing supervision by the CSSF, that is stricter than the one for SIF or SICAR. They are also required to appoint an AIFM (LFF, 2015a).

5.2 Specialised Investment Fund (SIF)

SIF is regulated by the Law of 13 February 2007. It can invest in any type of asset but its access is limited to well-informed investors. It can take the legal form of a common contractual fund or of an investment company and is subject to prior approval and ongoing supervision of the CSSF. It can be set up as an umbrella fund (LFF, 2015b).

5.3 Investment company in risk capital (SICAR)

The SICAR structure was specifically designed for private equity and venture capital investments. The investment must fulfil two conditions: the securities must be of high risk and it must have the intention to develop the portfolio companies. The high risk will be demonstrated, for example by proving that an investment has low liquidity. The intention to develop means that the SICAR wants to add value to the portfolio companies, by direct or indirect contribution in the launch of an entity, its development or by preparing it to be listed on the stock exchange (LFF, 2012a). The purpose of a SICAR fund needs to be investment in risk capital and compensation of investors for this risk by creating return through the management of the assets. It does not have any restriction on the lending amount nor any diversification rules. Its investment is limited to well-informed investors.

5.4 Reserved Alternative Investment Fund (RAIF)

RAIF was introduced by the Law of 23 July 2016. It is subject to the full AIFMD requirements and therefore benefits from the European passport (Elvinger Hoss Prussen, 2016). Only well-informed investors can invest in this type of fund, which is not subject

to the prior approval of the CSSF (LFF, 2016). This aspect makes the vehicle particularly attractive from a time-to-market perspective. RAIFs can be organised as umbrella funds, meaning that it can consist of sub-funds or be a stand-alone fund. It isn't subject to any investment or borrowing rules, which makes it a very flexible fund (ALFI, 2016).

The tax regime is generally the same as for a SIF with an annual subscription tax of 0,01% and an exemption from income and net wealth taxes and its distributions (LFF, 2016).

5.5 Financial holding company (SOPARFI)

The SOPARFI is a fully taxable Luxembourg resident company that takes advantage of the participation exemption⁶ in Luxembourg and that may benefit from double taxation treaties [...] (LFF, 2012b).

Its corporate purpose is to hold participations and related activities (Elvinger Hoss Prussen, 2017). The key strengths of the SOPARFI vehicle is its flexible structuring possibilities, as it can have different legal forms and thus is able to accommodate tailor-made structures. Moreover, its maturity and sustainability give stability and security (EY, n.d.). It is mainly used to hold special purpose vehicles⁷ and more rarely as a private equity fund vehicle (Association of the Luxembourg Fund Industry [Alfi], 2017b).

⁶ The participation exemptions allows for certain tax exemptions regarding the dividends received, the dividends remitted, the capital gains realised in the sale of shares and the qualifying participations (Kaplan & Sensoy, 2015)

⁷ A Special Purpose Vehicle (SPV) is a legal entity that fulfils one temporary objective for the sponsor. General uses for SPV are be the relocation of the risk to the SPV, financial engineering, raising capital, asset transfer, financing or securitisation (PwC, 2011)

6 Legal form

Investment company

A common feature of all the investment company forms, except SCS and SCSp is that they have limited liability to the amount of the participation of each shareholder in the company. The different existing legal forms for private equity are:

- ❖ SA: public limited company
- ❖ Sàrl: partnership limited by shares
- ❖ SCoSA: co-operative in the form of a public limited company
- ❖ SCS: limited partnership
- ❖ SCSp: special limited partnership

It is important to present the SCSp in further details, since it is significantly different from the other structures. With the implementation of the AIFMD, Luxembourg revised its contractual regime and included a provision in its law that introduces the SCSp. It constitutes an enhancement of the SCS, both being tax transparent vehicles. The SCSp is similar to the Anglo-Saxon model of limited partnership that has been the preferred vehicle for private equity firms. With the European directive on AIFM, a lot of former offshore funds were domiciliated to Europe. (PwC, 2014). A SCSp is a partnership agreement that is created between one general partner and one or several limited partners. Compared to the other forms available in Luxembourg, it benefits from more legal flexibility and can freely determine most of the rules. This includes also free choice of the accounting principles. The SCSp does not have a legal personality distinct from the partners. Moreover the limited partners can remain confidential and undertake certain actions without losing their status as limited partner (PwC, 2014). Figure 5 shows the increase in SCSp in Luxembourg.

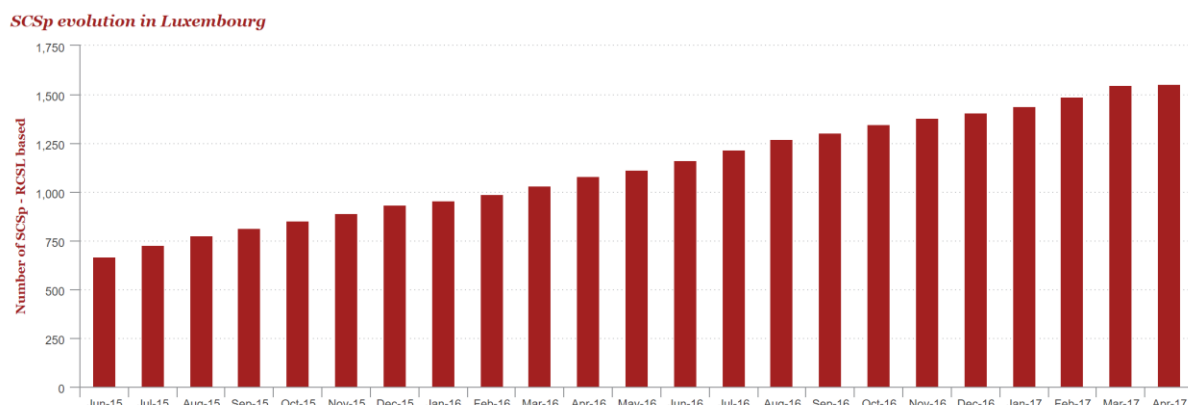


FIGURE 5 – Evolution of SCSp in Luxembourg from June 2015 to April 2017 (Source: PwC, 2017a)

Contractual fund

A private equity fund can also take the legal structure of a Common investment fund (FCP), which is a mutual fund established by a contract and is an undivided co-ownership of assets without legal personality (ALFI, 2017a).

7 Fund management

7.1 Tax treatment carried interest

The share of profits to AIFMs is treated as normal income and taxed at the highest marginal rate on global income. There exists an exception, where the employee of the AIFM is only subject to a quarter of the global tax rate.

The conditions to be fulfilled are:

- *The recipient was neither resident in Luxembourg nor subject to Luxembourg tax on his/her professional income during the 5 preceding years;*
- *The recipient becomes Luxembourg tax resident;*

- *No advance payments were received by the recipient;*
- *The entitlement to carried interest is conditional on the investors having priority in recovering their initial investment.*

The individual can benefit from this tax treatment for up to 10 years after having started his/her professional activity in Luxembourg (ALFI, 2017a, p. 17).

Part 4: SWOT analysis

1 Introduction

The aim of this part is to assess the strengths, weaknesses, opportunities and threats of the Luxembourg private equity industry as shown in Table 3.

Strengths	Weaknesses
➤ Political and financial stability ➤ Pro-activity towards external environment ➤ Broad spectrum of governance ➤ Diversity and quality of the ecosystem ➤ Driver of innovative businesses ➤ Multilingual country	➤ Distance to investors and portfolio companies ➤ Taxation of carried interest ➤ Limited capacity of the country
Opportunities	Threats
➤ Substance requirements ➤ Search for a reliable EU base for private equity firms	➤ Instability of the EU ➤ Overregulation from the EU

TABLE 3 – SWOT analysis (source: author)

2 Strengths

2.1 Stability

The political and financial stability of Luxembourg is a fundamental strength of the country. Indeed, the investors want the terms of the fund to remain stable during its entire lifetime. Due to the long-term character of private equity, managers therefore want to place the fund in a stable environment, in order to anticipate the regulations the fund has to respect and the costs that will arise.

❖ Financial stability

The Grand-Duchy demonstrates its financial stability by three main factors. It shows a robust growth performance, with a GDP growth of 3,5% in 2016 (1,7 % growth in the euro zone) (Banque Centrale du Luxembourg [BCL], 2017). It possesses fiscal strength, having among the most stable tax frameworks in Europe (PwC, 2017b). These factors as well as the soundness and transparency of its institutions convinced the rating agencies to reconfirm Luxembourg's triple A rating this year (Moody's, 2017).

❖ Political stability

In addition, the country possesses the fifth strongest political stability index in the world, which measures the "likelihood that the government will be destabilized or overthrown" (TheGlobalEconomy.com, 2017, para. 2). The political parties generally agree on the existing key issues. After elections, the government continues on the same trajectory, emphasising economic policies and continuing the initiatives set up by the former government (PwC, 2017b).

2.2 Pro-activity towards external environment

The government adjusts and adapts to external circumstances in order to ensure the long-term development of private equity. It is a pioneer in integrating international regulations into its national law, which ensures that the funds are compliant with requirements on a long-term basis. One interviewee underlined that it was favourable for

the industry that Luxembourg adopted the AIFMD into its national law early, even though it was a costly and time intensive process, as neither the government nor the firms could take the implementation process of another country as a template. The early implementation ensured firms to be compliant on a long-term basis early and thus gives clarity about the future. In addition to adjusting to the external environment, the Grand-Duchy also adapts its framework. The most recent examples are the introduction of RAIF and the creation of the special limited partnership. The former is an investment vehicle created as a result of the AIFMD, which forces private equity fund managers to be supervised and to follow specific rules. In response to this regulation, Luxembourg created an unregulated investment fund, that does not have to be approved by the CSSF and thus decreases time-to-market. The special limited partnership was created because the demand for substance creation in Luxembourg increased for private equity houses that had their funds located in the United Kingdom or in offshore jurisdictions. The vehicle offers a similar structure to the Anglo-Saxon limited partnership the firms are already familiar with. By adapting its legal framework to the external environment, the country is not only adjusting to the external environment but shows pro-activity by offering private equity houses the best suited products (PwC, 2014).

2.3 Broad spectrum of governance

Walther et al. (2011) stated that it is key for a small financial centre specialising in certain services to be able to adapt to global regulations and conditions. The country offers a varied panel of investment vehicles and multiple legal forms among which private equity houses can choose to create a fund that is structured according to the demands of the limited partners. The risk profile of the different funds can vary widely, from the UCI Part II with a maximum of 20% that can be invested in the same asset to the RAIF with no risk limit. Further, the private equity firm can choose if it wants the fund to be regulated, to be tax transparent and the kind of investors that are allowed to invest in it. This provides flexibility since the firms can find in one location products to create different funds that suit the needs of the investors.

2.4 Diversity and quality of the ecosystem

Being the second largest fund centre in the world, Luxembourg has built up an ecosystem, with specialists in multiple domains and organisations that support and promote the industry. Due to the concentration of financial companies and service providers specialised in the fund industry, the country has created agglomeration economies (Hesse, 2014).

❖ Development of ecosystem

Its development started with the European directive on Undertakings for Collective Investment in Transferable Securities (UCITS) in 1985. The Grand Duchy developed greatly in the fund business and is now recognized as an acknowledged leader in UCITS funds. UCITS are at the root of the development of an ecosystem of investment fund experts. Nowadays, these highly experienced experts can be found in every domain: product developer, administrators, fund lawyers, audit firms, tax advisors (ALFI, 2013b). With alternative investment fund industry developing, a parallel expertise has developed, leveraging on the development of UCITS. High qualified professions are centralised in a small place and easy to reach. The interviewees considered this to be an advantage in daily business. The different service providers are easier to reach in Luxembourg than in other large cities and it is possible to find an expert for every service needed in the fund industry. The human capital and knowledge of these service firms provides an essential intangible asset to the country.

❖ Relationship between government and companies

In addition, the government has a business-friendly attitude. It regularly meets with employers and representatives to discuss important decisions (ALFI, 2017a). Moreover, one interviewee underlined that the CSSF is also easy to reach: during the compliance process for the AIFMD, the supervisor was supportive to ensure that companies are aligned on time with new law. The broadness and quality of services

offered in Luxembourg together with an easy access to the different players offers a supportive environment for the private equity firms.

❖ **Driver of innovative businesses**

The country is leading a policy of research and development with the objective to support innovative businesses, stimulating research and development and help Luxembourg companies stay competitive (Gouvernement du Grand-Duché du Luxembourg, 2016). In particular, the development of Fintech, Regtech and blockchain can help private equity firms stay on top of the edge and gain competitive advantages by being the leaders in implementing these products into their businesses. Together with enhanced data management, Fintech gives firms the possibility to increase the efficiency of their operating model by automating and optimizing product management and marketing processes with FinTech technology. Regtech can help the firms in staying compliant with regulations especially by supporting it on labour-intensive tasks (Dr. Duprel, n.d.). Blockchain will, in theory, be able to take over processes of fund distribution, improve its speed and efficiency and reduce its costs (Deloitte, 2016b).

2.5 Multilingualism

The main advantage of multilingualism in Luxembourg for the industry consists in the possibility to create legal documents regarding fund creation either in French, German or English. One interviewee mentioned that Luxembourg is the only country offering this possibility. It facilitates fund creation, saves costs and reduces margin for error that could arise in the translation process.

3 Weaknesses

3.1 Distance to investors and portfolio companies

A major disadvantage raised by the interviewees is the distance of the country to target companies and investors. A statistic from Preqin (2017c) shows that out of 1998 funds in the market at the second quarter of 2017, 51% “are targeting investment

opportunities in North America”. Three interview partners explained that general partners get involved in the management of the different portfolio companies and that it is therefore essential to stay close to these companies. Luxembourg is not an ideal location in this aspect. Moreover, according to these interviews, general partners need to stay in an environment where they have a large network. This is essential to find the right investors and deals. This network cannot be simply transferred from one city to another.

3.2 Taxation of carried interest

As mentioned in the previous part, Luxembourg doesn't have a specific tax treatment for the remuneration of general partners. Although there exists one regulation that reduces the payable tax to one quarter of income tax, this rule is only valid if the recipient is a new Luxembourg resident and it is limited to ten years (Deloitte, 2015). One interviewee stated that this rule is not attracting general partners to move to the Grand-Duchy, as the period of exemption is limited in time.

3.3 Limited capacity of Luxembourg

On the other hand, Luxembourg would not be able to accommodate all the players of the industry, due to its limited size. In the past year, several companies confirmed their move to Luxembourg. These included banks, insurance companies but also firms active in private equity, such as Blackstone and Carlyle. The companies are however worried about the size of the country and the logistical issues that come along with it (Huberty, 2017). The Grand Duchy is not able to accommodate large companies with many employees in a short period of time.

4 Opportunities

4.1 Substance requirements

Due to the increase of international regulations such as BEPS and AIFMD, substance requirements are increasing. This encourages private equity houses to concentrate their operational activities in one country, in order to stay compliant in the

long-term with regulations. Currently, more and more firms are increasing their substance in one location. A lot of private equity firms already have substance in Luxembourg, in form of back office. Luxembourg can take advantage of this trend, by marketing the country as a prime location for private equity. Interviewees confirmed that more and more firms are relocating part of their business to the Grand-Duchy, especially their middle office.

4.2 Search for a reliable EU base for private equity firms

Private equity firms need a EU base in order to benefit from the EU passport that enables them to distribute and market their funds over the European Union. Luxembourg is known for its political stability, moderate political views among the population and a pro-European orientation. Firms want to ensure their access to the single market. However, the vote for Brexit in the United Kingdom has made many firms that are based in the UK unsure, if their EU passport will be maintained after the negotiations of the Brexit. Therefore, more and more firms are reconsidering their location. Moreover, nationalism has risen among other member states of the EU. Especially in France, Netherlands, Spain, Greece and Germany euroscepticism is on the rise (O. Wright, 2016). Carlyle and Blackstone already decided to move their location to Luxembourg to ensure they can sell their services throughout the single market (Espinoza & Jenkins, 2017). This search for a stable environment will be beneficial for Luxembourg.

5 Threats

5.1 Instability of the European Union

While it is an opportunity for Luxembourg if firms consider the relocation of their funds, the instability of the European Union represents a threat for the private equity industry in Luxembourg. Indeed, due to its cross-border character it is essential that free mobility is guaranteed to ensure the functioning of the private equity business. Luxembourg is particularly impacted by this instability, as it is the first country in terms

of cross border fund distribution and it is thus likely to disrupt all activities with intermediaries (ALFI, n.d.). One interview partner mentioned the importance of maintaining the same business relation with the UK after Brexit. While the development of middle offices increases the talent in risk management and compliance that can be found in the country, the business relies on the partnership with the UK. A lot of general partners are located in London and thus free movement between front office and back office must be maintained.

5.2 Overregulation by the EU

In 2017, increasing regulation is considered to be the most crucial challenges for the industry (Statista, 2017). With the introduction of the AIFM directive, the EU started to regulate alternative investment funds, and a review of the directive is being planned. However, an overregulation will make this investment form less attractive, especially because it substantially increases the costs for the firms. At this time, Luxembourg's AIFMD implementation has more advantages for the firms than the AIFMD implementation in Germany for example. This is due to the fact, that the Grand Duchy used it as an opportunity to offer a new product to the firms. Indeed, the RAIF was created in the AIFMD context: it does not need approval from the CSSF but is indirectly supervised, due to its fund manager who is controlled by the CSSF as a result of the AIFMD. If regulation at EU level increases substantially, Luxembourg will not be able to create unique investment vehicles anymore but every EU country will offer very similar products. This would remove one of Luxembourg's competitive advantages.

Moreover, regulation is proportionally costlier for smaller firms than for large firms, as the costs will be spread over fewer funds. Therefore, overregulation may put small private equity firms at a risk.

Part 5: Prospective for future trends

1 Introduction

Private equity is a cross-border industry; the investments, the investors, the funds, the management and the administration might all be situated in different locations. This part of the thesis assesses the aspects of the SWOT analysis that will play an essential role for the Luxembourg's private equity business in the future. Three subjects were identified, that are primordial for the future development of the industry in Luxembourg.

2 Expertise

First and foremost, the Luxembourg's private equity industry should continue to enhance the level of expertise of the private equity sector in Luxembourg. All interviewees agreed on Luxembourg's advantage that private equity firms can easily access the various practitioners of the industry being based in one location. One interviewee underlined that the concentration of different service providers of private equity with specific knowledge is a main asset of Luxembourg. It was further highlighted that, as a small environment, getting in contact with the different key players is easier and faster than in large countries. An increased development of the expertise can be supported by two main factors:

❖ Talent attraction

There was no general agreement between interviewees on the facility of finding the right talents for their firm. While one interviewee mentioned that on the whole, the demand for employees can be covered by recruiting people within Luxembourg, another interview partner stated that there is a lack of people with the right profile in the country. Moreover, several interviewees pointed out, that if employees had to be hired from another country, it was difficult to convince them that the Grand Duchy is an attractive place to work and live. However, once they had moved to Luxembourg, they were often keen on staying in the country on the long term. Even if, as two interviewees mentioned,

general partners are more reluctant to move out of their networking environment, the country should still make further efforts in convincing talents to move to the country. These can be for example risk managers, lawyers or tax advisors. Indeed, businesses are keen on operating in a highly experienced environment.

❖ **Research development**

Moreover, Megginson (2004) argued that research and development, especially at university or the national laboratory, is a relevant feature for developing private equity industry, particularly regarding venture capital. Although the Luxembourg School of Finance that is affiliated to the University of Luxembourg is already active in the research, the university stated that its publications still lack visibility and that it faces difficulties to attract researchers to the Grand Duchy (Organisation for Economic Co-operation and Development [OECD], 2016). A sound centre of research would provide analysis from outside the industry and consequently offer a different angle to evaluate the private equity business and related sectors.

3 Innovation

Secondly, the government should continue to support innovative businesses. The recent development of financial services such as Regtech and Fintech can inter alia support the private equity industry in Luxembourg. With the growing demand of private equity funds and an increase of dry powder, the investment firms are required to become more efficient, notably by reducing their operating costs and using data analytical tools for decision making (PwC, 2015). FinTech and Regtech may therefore become crucial service providers in the coming years as they will automate processes at administration level and support the firms to comply with regulatory requirements. These smart technologies are improving the cost structure of the firm. The innovative services might further diversify the private equity ecosystem in Luxembourg and strengthen its position as a private equity hub. As one of the pioneers in this business, Luxembourg may be able to gain a competitive advantage.

These technologies may also partly solve Luxembourg's issue of limited capacity. With these technologies, the firms will be able to automate more work of the back office and the middle office. The size of a firm should therefore not be determined by the number of employees but rather by its assets under management.

4 Adaptation to external environment

Being reactive to external circumstances has always been a distinctive feature of Luxembourg. Firstly, it possesses a diversified toolbox of legal structures for private equity funds, which makes its legal framework attractive for different types of investors. Moreover, its adaptability and reactivity is demonstrated for example by creating new vehicles as a reaction to international regulations. The Grand Duchy should keep this forward-looking approach. This gives businesses the confidence that Luxembourg is a favourable environment for private equity due to its cooperation with the external environment and its long-term approach.

5 Conclusion

Owing to its forward-looking approach and its proactivity, Luxembourg has become an important centre for private equity. It is crucial for its successful long-term persistence that it maintains its cooperative attitude, further develops its expertise and remains open-minded for new innovative businesses.

Conclusion

Since no previous research had investigated the specificities of Luxembourg's private equity industry, the current study contributes to the literature regarding the private equity business within the EU. It is hoped that this study will not only offer a deeper understanding of the characteristics that ensure Luxembourg's strength and growth as a private equity hub, but that it will also position Luxembourg's characteristics in the global macro environment.

First and foremost, thanks to its stability and multilingual environment the country possesses sound attributes that are favourable for the private equity business. Moreover, the responsiveness to the external environment, the legal toolbox and the support of innovative businesses reveal that Luxembourg is a business-friendly environment that is open to dialogue with companies. In addition, the country can benefit from the recent development of the private equity industry by helping businesses maintain their activities despite new regulatory requirements.

Besides its major assets, the country also faces drawbacks such as its location and small size or its unfavourable environment for general partners. However, the main threats are an overregulation of the industry and its dependence on good inter-country relations, due to the cross-boundary feature of the industry. To conclude, Luxembourg may ensure to remain a preferred destination for private equity funds by focusing on developing further expertise, staying innovative and remain a pioneer in adapting to externalities.

This research solely focused on the specificities of Luxembourg for private equity funds. Due to the development of start-ups in Luxembourg, it would be promising for future research to address the investment opportunities private equity fund may find in Luxembourg. Second, since this study was exploratory in nature, more extended research should verify its results. Owing to the opacity of the business, only a highly trusted

association or research centre may however have the opportunity to undertake a study of the overall return, risk and costs of private equity businesses in Luxembourg. Furthermore, it might be useful to benchmark Luxembourg against one of its main competitors in the EU or against an offshore regulation. Finally, as the industry is currently experiencing some movement due to a changing and uncertain environment, it would be most interesting to undertake a study in ten to fifteen years to assess if Luxembourg managed to remain a private equity hub in the long-term.

Certainly, the private equity sector of Luxembourg is facing important changes and Luxembourg needs to make continuous efforts to remain attractive. As the industry is opaque, the government faces major challenges in evaluating what measures are needed. It must rely to a large extent on the statements of the industry itself as independent analyses are non-existent. However, it should take the optimistic approach of Sir Winston Leonard Spencer-Churchill: "A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty".

References

Administration des contributions directes. (2017a). *Conventions en négociation* [Conventions in negotiation]. Online http://www.impotsdirects.public.lu/fr/conventions/conv_neg.html, viewed on 8 August 2017.

Administration des contributions directes. (2017b). *Conventions en vigueur* [Conventions in force]. Online http://www.impotsdirects.public.lu/fr/conventions/conv_vig.html, viewed on 8 August 2017.

Arendt & Medernach. (2016). *The alternative investment fund managers law*. Online <http://www.alfi.lu/sites/alfi.lu/files/ALFI-AIFMD-final.pdf>, viewed on 8 August 2017.

Association of the Luxembourg Fund Industry [ALFI]. (2013a). *Luxembourg private equity and venture capital investment vehicles*. Online <http://www.luxembourgforfinance.com/sites/luxembourgforfinance/files/alfi-private-equity.pdf>, viewed on 8 August 2017.

Association of the Luxembourg Fund Industry [ALFI]. (2013b). *Luxembourg: the global fund centre*. Online http://www.alfi.lu/sites/alfi.lu/files/files/Publications_Statements/Brochures/Luxembourg-the-global-funds-centre.pdf, viewed on 8 August 2017.

Association of the Luxembourg Fund Industry [ALFI]. (2016) *Luxembourg reserved alternative investment funds: law of 23 July 2016 (2016 law) relating to so-called "Reserved Alternative Investment Funds" (RAIFs)*. Online http://www.alfi.lu/sites/alfi.lu/files/files/Publications_Statements/Brochures/ALFI-RAIF-final.pdf, viewed on 8 August 2017.

Association of the Luxembourg Fund Industry [ALFI]. (2017a). *Luxembourg private equity*. Online http://www.alfi.lu/sites/alfi.lu/files/Alfi-Private-Equity-BAT-web_0.pdf, viewed on 8 August 2017.

Association of the Luxembourg Fund Industry [ALFI]. (2017b). *Private equity and venture capital funds*. Online <http://www.alfi.lu/setting-luxembourg/alternative-investment-funds/private-equity-and-venture-capital-funds>, viewed on 8 August 2017.

Association of the Luxembourg Fund Industry [ALFI]. (n.d.). *Statistics: Luxembourg a global player*. Online <http://rapport.alfi.lu/en/statistics-luxembourg-global-player>, viewed on 8 August 2017.

Bain & Company. (2017). *Global private equity report 2017*. Online http://go.bain.com/rs/545-OFW-044/images/BAIN_REPORT_Global_Private_Equity_Report_2017.pdf, viewed on 8 August 2017.

II.

Baldi, F. (2013). *Private equity targets: strategies for growth, market barriers and policy implications* (1. Aufl.;1; ed. Vol. 33). Milano: Springer Verlag Italia.

Banque Centrale du Luxembourg [BCL]. (2017). *Revue de stabilité financière [Financial stability review]*. Online http://www.bcl.lu/fr/publications/revue_stabilite/Revue-de-stabilite-2017/revue-de-stabilite-2017.pdf, viewed on 8 August 2017.

Bayaz, D. (2014). *„Heuschrecken“ zwischen Rendite, Reportage und Regulierung [‘Locusts’ between return, reportage and regulation]*. (doctoral thesis), Universität Hohenheim, Heidelberg.

Blackstone. (2017). *Patient capital, private opportunity: The benefits and challenges of illiquid alternatives*. Online https://www.cfainstitute.org/learning/products/publications/contributed/altinvestment/Documents/patient%20capital%20private%20opportunity_blackstone.pdf, viewed on 8 August 2017.

CACEIS. (2010). *A thorough understanding of Private Equity*. Online <https://cld.bz/bookdata/KWrpYwa/basic-html/index.html#2>, viewed on 8 August 2017.

Cendrowski, H., Martin, J. P., Petro, L. W., & Wadecki, A. A. (2012). *Private equity: history, governance and operations* (H. J. W. Sons Ed.).

Circular CSSF 07/283 Re: Entry into force of the law of 13 February 2007 relating to specialised investment funds of 28 February 2007, www.cssf.lu/fileadmin/files/Lois_reglements/Circulaires/Hors_blanchiment_terrorisme/cssf07_283eng.pdf, viewed on 6 August 2017.

Clarkson, D., Jaecklin, S., & Kaczmariski, K. (2014). *Domiciles of alternative investment funds*. Online http://www.oliverwyman.com/content/dam/oliver-wyman/global/en/2014/dec/Oliver_Wyman_Domiciles_of_Alternative_Investment_Funds.pdf, viewed on 8 August 2017.

Coekelbergs, O. (2014) *Private equity in Luxembourg: stability is our number one strength/Interviewer: Luxembourg Private Equity & Venture Capital Association [LPEA]*. Online, [http://www.ey.com/Publication/vwLUAssets/Stability_Is_Our_Number_One_Strength/\\$FILE/March15_CapitalV_Stability%20Is%20Our%20Number%20One%20Strength.pdf](http://www.ey.com/Publication/vwLUAssets/Stability_Is_Our_Number_One_Strength/$FILE/March15_CapitalV_Stability%20Is%20Our%20Number%20One%20Strength.pdf), viewed on 8 August 2017.

Coekelbergs, O. (2015). *On-shoring your private equity fund to Luxembourg, why not?* Online http://www.ey.com/lu/en/newsroom/pr-activities/articles/article_20150309_on-shoring-your-private-equity-fund-to-luxembourg--why-not-, viewed on 8 August 2017.

D'Anterrosches, E. (2017). *Formation PE/RE Niveau 1 AIFMD Essentials (All you need to know...)*. Arendt & Medernach. Unpublished document.

- Deloitte. (2015). *Taxation of carried interest*. Online
<https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/tax/lu-en-dsc-taxationcarriedinterest-15112012.pdf>, viewed on 8 August 2017.
- Deloitte. (2016a). *Analysing BEPS Impact private equity sector*. Online
<https://www2.deloitte.com/content/dam/Deloitte/in/Documents/tax/BEPS/in-tax-pe-noexp.pdf>, viewed on 8 August 2017.
- Deloitte. (2016b). *Impacts of the blockchain on fund distribution*. Online
https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/technology/lu_impact-blockchain-fund-distribution.pdfm, viewed on 8 August 2017.
- Deloitte. (2016c). *Intro to PERE - Part III: Tax highlights*. Unpublished document.
- Deloitte. (2017). *Introduction to Private Equity and Real Estate Funds*. Unpublished document.
- Dewar, B. (2016). *Common reporting standards*. *Capital V*, 8, p. 21.
- Dziekoński, K., & Ignatiuk, S. (2016). Venture capital and private equity investment preferences in selected countries. *e-Finanse*, 11(3), 128-137.
- Elvinger Hoss Prussen. (2016). *Reserved alternative investment funds: A new Luxembourg regime for alternative investment funds*. Online
<https://www.elvingerhoss.lu/sites/default/files/documents/publications/EHP-RAIF-Memo-ENG.pdf>, viewed on 8 August 2017.
- Elvinger Hoss Prussen. (2017a). *SOPARFI: The Luxembourg holding and finance company*. Online
https://www.elvingerhoss.lu/sites/default/files/documents/legal_topics/other_areas/EHP-Soparfi-Memo-ENG.pdf, viewed on 8 August 2017.
- Elvinger Hoss Prussen. (2017b). *Specialised Investment Funds: Luxembourg regime for investment funds dedicated to sophisticated investors*. Online
https://www.elvingerhoss.lu/sites/default/files/documents/legal_topics/investment/EHP-SIF-Memo-ENG.pdf, viewed on 8 August 2017.
- Elvinger, J., Gaston-Braud, O., & Kuske, J. (2015). *The asset management review*. Luxembourg: Law business research
- Espinoza, J. (2017). Private equity fundraising in Europe hits 8-year high. *Financial Times*. Online
<https://www.ft.com/content/ea98a9c4-3892-11e7-ac89-b01cc67cfeec>, viewed on 8 August 2017.

IV.

- Espinoza, J., & Jenkins, P. (2017). Private equity looks to Luxembourg for access to single market. *Financial Times*. Online <https://www.ft.com/content/ea98a9c4-3892-11e7-ac89-b01cc67cfeec>, viewed on 8 August 2017
- Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010, O.J.E.U., L 174, 1 July 2011, p. 1.
- Felbermayr, G. (2016). Brexit: Was jetzt? [Brexit: Now what?]. *Wirtschaftsdienst*, 96(7), 450-451. doi:10.1007/s10273-016-1998-9
- Fleischer, V. (2005). The missing preferred return. *The Journal of Corporation Law*, 31(1), 77.
- Frequently Asked Questions CSSF of 6 July 2017, version 11, concerning the Luxembourg Law of 12 July 2013 on alternative investment fund managers as well as the Commission Delegated Regulation (EU) No 231/2013 of 19 December 2012 supplementing Directive 2011/61/EU of the European Parliament and of the Council with regard to exemptions, general operating conditions, depositaries, leverage transparency and supervision. Online <http://www.cssf.lu/en/supervision/ivm/aifm/faq/>, viewed on 6 August 2017.
- Gouvernement du Grand-Duché du Luxembourg. (2016). *Recherche et innovation: objectifs* [Research and innovation: objectives]. Online <http://www.gouvernement.lu/4264057/recherche-innovation>, viewed on 8 August 2017.
- Groh, A., Liechtenstein, H., Lieser, K., & Biesinger, M. (2016). *The venture capital and private equity country attractiveness index: 2016 annual*. Online <http://blog.iese.edu/vcpeindex/files/2016/06/annual.pdf>, viewed on 8 August 2017.
- Harris, R. S., Jenkinson, T. I. M., & Kaplan, S. N. (2014). Private Equity Performance: What Do We Know? *The Journal of Finance*, 69(5), 1851-1882. doi:10.1111/jofi.12154
- Hernandez, M. (2012). *The Directive on Alternative Investment Fund Managers: Comparative Analysis of Certain Aspects of Regulatory Regimes in Europe, Canada and the United States of America*. (Dissertation/Thesis), ProQuest Dissertations Publishing, Online http://uclouvain.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwnV1LS8NAEB5sPSgefOOjwoBXq81ummy8aEkNlr0ogngq2WwqSElqahR_kX_Tnd3EFpUevGXzWDJsMjvP7wPg7LTT_qETpNsRMpFJN2BewHwRK1cpwXkqpctdj5qTBxG77Qc3EZxqXNaRARvatZl0mlvCQXNz4hajuvN3ncuJi9topGidGvFqdGAZcfzeJy8B8e_3LfDSyK6DK3RuGpxvyXUjY7TbQOz3W_ji0wkYaMY0xiywrQQjuzch7H8d-vvwFr_bI0_CYspdkWNAbx-zZ86u8Hv_Uh5hn2xlXsUA8tOgcFFjEqM4W2iKaYnmM4QxPHGvAE8xGGtvQAe6a105y6S5-IOywwPuiQWIFQ32DTAydoYBNijPXs2kZFaxujtY3p6SrVtAPH0dV9eN2uxR9Wf8d0OJOd70lzy7N0D1CJjnISjp0gFa4USsQjb-TFXNtk5CPJfWgtmulg8eVDWNWmDrPBkxY0X4syPYIVvYB5-abF_wIQ8dQj, viewed on 8 August 2017.

- Hesse, M. (2014). On borrowed size, flawed urbanisation and emerging enclave spaces: The exceptional urbanism of Luxembourg, Luxembourg. *European Urban and Regional Studies*, 23(4), 612-627. doi:doi:10.1177/0969776414528723
- Huberty, M. (2017). Brexit: 12 companies to relocate to Lux. *Delano*. Online <http://delano.lu/d/detail/news/brexit-12-companies-relocate-lux/143870>, viewed on 8 August 2017.
- Kaplan, S. N., & Schoar, A. (2005). Private Equity Performance: Returns, Persistence, and Capital Flows. *The Journal of Finance*, 60(4), 1791-1823. doi:10.1111/j.1540-6261.2005.00780.x
- Kaplan, S. N., & Sensoy, B. A. (2015). Private Equity Performance: A Survey. *Annual Review of Financial Economics*, 7(1), 597-614. doi:10.1146/annurev-financial-111914-041858
- Leleux, B., Van Swaay, H., & Megally, E. (2015). *Private equity 4.0: reinventing value creation*. West Sussex: Wiley.
- Linklaters (Producer). (2013). Implementation of the AIFM Directive in Luxembourg. Online http://www.linklaters.com/pdfs/mkt/luxembourg/New_2013_tool_kit_implementation_of_AIFM_directive_10_July_2013.pdf, viewed on 8 August 2017.
- Luxembourg for Finance. (2011). New tax regime for highly skilled expatriates. Online <http://www.luxembourgforfinance.com/de/news/new-tax-regime-highly-skilled-expatriates>, viewed on 8 August 2017.
- Luxembourg for Finance [LFF]. (2012a). *Luxembourg private equity and venture capital investment vehicles*. Online <http://www.alfi.lu/sites/alfi.lu/files/LFF-BROCH-PRIVATE%20EQUITY.pdf>, viewed on 8 August 2017.
- Luxembourg for Finance [LFF]. (2012b). *SOPARFI*. Online <http://www.luxembourgforfinance.com/sites/luxembourgforfinance/files/lff-brochure-soparfi.pdf>, viewed on 8 August 2017.
- Luxembourg for Finance [LFF]. (2015a). *How to set up a non-UCITS ("Part II") fund*. Online http://www.luxembourgforfinance.com/sites/luxembourgforfinance/files/lff_how_to_set_up_non_ucits_fund.pdf, viewed on 8 August 2017.
- Luxembourg for Finance [LFF]. (2015b). *How to set up a specialised investment fund (SIF)*. Online http://www.luxembourgforfinance.com/sites/luxembourgforfinance/files/lff_how_to_set_up_sif.pdf, viewed on 8 August 2017.
- Luxembourg for Finance [LFF]. (2016). *How to set up a RAIF (reserved alternative investment fund)*. Online http://www.luxembourgforfinance.com/sites/luxembourgforfinance/files/lff_how_to_set_up_raif.pdf, viewed on 8 August 2017.

VI.

- Luxembourg for Finance [LFF]. (n.d.). Luxembourg's got talent. Online http://www.luxembourgforfinance.com/sites/luxembourgforfinance/files/luxembourgs_got_talent.pdf, viewed on 8 August 2017.
- Luxembourg Private Equity & Venture Capital Association [LPEA]. (2016). *Annual report 2016*. Online <http://www.lpea.lu/wp-content/uploads/2017/05/lpea-annual-report-2017-web.pdf>, viewed on 8 August 2017.
- Marasová, D., Čulková, K., & Bittner, M. (2017). Attractiveness of European Countries from the view of Private Equity and its Impact to the Industry in Europe. *TEM Journal*, 6(2), 326-335. doi:10.18421/TEM62-18
- Meggison, W. L. (2004). Toward a global model of venture capital? *Journal of Applied Corporate Finance*, 16(1), 89-107.
- Metrick, A., & Yasuda, A. (2010). The Economics of Private Equity Funds. *The Review of Financial Studies*, 23(6), 2303-2341. doi:10.1093/rfs/hhq020
- Moody's. (2017). Rating action: Moody's affirms Luxembourg's Aaa rating; stable outlook. Online https://www.moody's.com/research/Moodys-affirms-Luxembourgs-Aaa-rating-stable-outlook--PR_362665, viewed on 8 August 2017.
- Ocorian. (2017). Common reporting standard ("CRS") and the impact on private equity investment structures. Online <https://www.ocorian.com/thought-leadership-publications/publications/common-reporting-standard-crs-and-the-impact-on-private-equity-investment-structures/>, viewed on 8 August 2017.
- Organisation for Economic Co-operation and Development [OECD]. (2017). *About the inclusive framework on BEPS*. Online <http://www.oecd.org/tax/beps-about.htm>, viewed on 8 August 2017.
- Kolb, R. W. (Ed.) (2008). *Encyclopedia of business ethics and society* (Vols. 1-5). Thousand Oaks, CA: SAGE Publications Ltd. doi: 10.4135/9781412956260
- Payne, J. (2011). Private Equity and Its Regulation in Europe. *European Business Organization Law Review (EBOR)*, 12(4), 559-585. doi:10.1017/S1566752911400021
- Peroni, C., Riillo, C. A. F., & Sarracino, F. (2016). Entrepreneurship and immigration: evidence from GEM Luxembourg. *Small Business Economics*, 46(4), 639-656. doi:10.1007/s11187-016-9708-y
- Preqin. (2017a). *2017 Preqin global private equity and venture capital report: sample pages*. Online https://www.preqin.com/docs/samples/2017-Preqin-Global-Private_Equity-and-Venture-Capital-Report-Sample-Pages.pdf?rnd=1, viewed on 8 August 2017.

- Preqin. (2017b). *Investor outlook: alternative assets H1 2017*. Online, <http://www.benefitscanada.com/wp-content/uploads/2017/02/Preqin-Investor-Outlook-Alternative-Assets-H1-2017.pdf>, viewed on 8 August 2017.
- Preqin. (2017c). *Preqin quarterly update: private equity & venture capital Q2 2017*. Online <https://www.preqin.com/docs/quarterly/pe/Preqin-Quarterly-Private-Equity-Update-Q2-2017.pdf>, viewed on 8 August 2017.
- PwC. (2011). *The next chapter: creating and understanding of special purpose vehicles*. Online <https://www.pwc.com/gx/en/banking-capital-markets/publications/assets/pdf/next-chapter-creating-understanding-of-spps.pdf>, viewed on 8 August 2017.
- PwC. (2012). *Current Outlook on AIFMD for Luxembourg Private Equity Structures*. Online <https://www.pwc.lu/en/aifm/docs/pwc-flyer-aifmd-pe-structures.pdf>, viewed on 8 August 2017.
- PwC. (2014). Luxembourg limited partnership. Online, <https://www.pwc.lu/en/private-equity/docs/pwc-private-equity-lux-limited-partnership.pdf>, viewed on 8 August 2017.
- PwC. (2015). *Alternative asset management 2020: Fast forward to centre stage*. Online, <https://www.pwc.com/jg/en/publications/alternative-asset-management-2020.pdf>, viewed on 8 August 2017.
- PwC. (2016). *Doing private equity deals in the new international tax environment: What PE deal teams need to know*. Online <http://www.pwc.com/us/en/private-equity/assets/pwc-doing-private-equity-deals-in-the-new-international-tax-environment-what-pe-deal-teams-need-to-know.pdf>, viewed on 8 August 2017.
- PwC. (2017a). Luxembourg limited partnership. Online <https://www.pwc.lu/en/private-equity/current-challenges-luxembourg-limited-partnership.html>, viewed on 8 August 2017.
- PwC. (2017b) Luxembourg: overview. Online <http://taxsummaries.pwc.com/ID/Luxembourg-Overview>, viewed on 8 August 2017.
- Renner, O., Moulla, M., & Schwabe, H. (2012). AIFMD seminar Stream 2: Organisational aspects. *AIFMD - Luxembourg update*. Online http://www.arendt.com/events/documents/seminars/2012.10.17_arendt__medernach_-_aifmd_luxembourg_update_-_conference_materials_1.pdf, viewed on 8 August 2017.
- Shobe, J. (2016). Misaligned interests in private equity. *Brigham Young University Law Review*, 2016(5), 1435.
- Statista. (2017). *Private equity in Europe*. Online <https://www.statista.com/statistik/register/dossier/statista-dossier/28113>, viewed on 8 August 2017.

VIII.

- Sunday Business Post. (2015). Chasing the rise of private equity. *The Sunday Business Post (All Ireland)*. Online
http://uclouvain.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwnV1ZS8NAEB48HhQE K171lvge3aub5klFDSK-CAXxKewVDyRNY-vvdyZpUAQRfN9Admb2229m5wCQ4oTFPzCBDwrhFHJ7MhidDqRz2kr8PDGOO0-RgrtM3F-ltxml6px3kYJW2x1INsjtx46C5qdcD_EyZehhnVWTmMZIOXPrfKbGliwLJTUzfLw2EGzou7uv2Fv c6Fk6_DaleW0eSS2mbnxRruz874V6LPa7-0a__2XPegRlFWmCnV00VrKBiyEchOOL58NBQsiplERHvcQjYuoqmniWYjCZIYUfQtG2fXo8iaeTO 2In5C6xVRryl3BnLScp4a5IUpcsSCNUInzWhsbpOZWaRR_cN6mGjliS1qpPCJINuwZii5vpw2RXh-FyJlteQhwUVDroRlxnqXssBSp7wQBe_DDok0pzMxrY3LkRWgG8W16MNRJ5a87Lb6nn9JZe-vBfuwihxl0D7YH8DStJ6FQ1hBIYxnH-al_ATLZ7k9, viewed on 8 August 2017.
- TheGlobalEconomy.com. (2017). Political stability - country rankings. Online
http://www.theglobaleconomy.com/rankings/wb_political_stability/, viewed on 8 August 2017.
- Thomsen, S. (2009). Should Private Equity Be Regulated? *European Business Organization Law Review (EBOR)*, 10(1), 97-114. doi:10.1017/S1566752909000974
- Tyne, B. (2016). Europeas PE waterfall becomes global standard. In: Euromoney Trading Limited.
- Vermeulen, E. P. M., & McCahery, J. A. (2010). Private equity regulation: A comparative analysis. *Journal of Management and Governance*, 2010(14), 197-233. doi:10.1007/s10997-010-9139-0
- Walther, O., Schulz, C., & Dörry, S. (2011). Specialised International Financial Centres and their crisis resilience: The case of Luxembourg. *Geographische Zeitschrift*, 99(2-3), 123-142.
- Wishart, I. (2017). All for one: emboldened EU united against U.K. over Brexit. *Bloomberg Politics*.
- Wright, M., Wilson, N., Gilligan, J., Bacon, N., & Amess, K. (2016). Brexit, Private Equity and Management. *British Journal of Management*, 27(4), 682-686. doi:10.1111/1467-8551.12191
- Wright, O. (2016). Euroscepticism on the rise across Europe as analysis finds incnreasing opposition to the EU in France, Germany and Spain. *Independent*. Online
<http://www.independent.co.uk/news/world/europe/euroscepticism-on-the-rise-across-europe-as-analysis-finds-increasing-opposition-to-the-eu-in-france-a7069766.html>, viewed on 8 August 2017.

