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Hedge Funds in the Periphery: An Analysis of Structures Influencing Fund Behavior in the Icelandic and Cypriot Financial Crises

Abstract

Hedge funds are often viewed from a positive or negative lens in the public and academic forum. However, both of these perspectives neglect structuralist factors. This paper analyzes the effect of these antecedent economic, political, and legal structures. I argue that these structures are at the root of hedge fund behavior, particularly during financial crises. The financial crises of two peripheral countries, Iceland and Cyprus, are used as case studies to illustrate how hedge fund involvement diverges as a result of structural factors.

Keywords

hedge funds, currency market, distressed debt, sovereign debt, restructuring, Eurozone crisis, Iceland, Cyprus

1 INTRODUCTION

In the wake of the 2008 global financial crisis, there was a universal instinctual search for blame. Hedge funds, perceived as opaque speculation vehicles, naturally became the antagonists of the press, politicians, and public. This was particularly severe for the Eurozone crisis, where the market assault on the Euro, sovereign debt, public banking sector securities, and contagion fears were heavily pronounced. David Oddsson, former Icelandic Prime Minister and governor of the Central Bank of Iceland (CBI), scathingly remarked that "there is an unpleasant odour of unscrupulous dealers [hedge funds] who have decided to make a last stab at breaking down the Icelandic financial system. They will not get away with it." (Ibison 2008).

Oddsson's dramatic finger-pointing should not come as a surprise given the island country's unprecedented circumstances. In the span of three consecutive days in October 2008, the country's three largest private banks became insolvent after the post-Lehman collapse liquidity crunch, earning the title of the largest systemic banking collapse in history relative to the size of the national economy (*The Economist* 2008). Meanwhile, Cyprus, another peripheral island-state with an outsized private banking sector, initially weathered the 2008 global financial crisis, only to befall the same fate as Iceland five years later in 2013. The two largest Cypriot banks, Laiki and Bank of Cyprus (BoC), experienced severe asset writedowns due to Greek holdings in 2013 following Greece's private-sector-involvement (PSI) restructuring', putting them into instantaneous bankruptcy.

These two situations were global open-invitations for hedge funds to deploy capital in equity, debt, and currency markets on long/short bases, through derivatives, and with substantial leverage. They doubled-down on massive carry-trades made in 2006 to profit on Iceland's pre-crisis interest-rate differential (Aliber & Zoega 2011), later unwinding their positions in 2008 and shorting the Icelandic króna as the country's scales tipped (ibid). Funds shorted Icelandic bank debt via credit-default swaps (CDS) on the way down but reversed their positions by buying into debt at the bottom during CDS auctions (Jónsson & Sigurgeirsson 2017). They snapped up Cypriot sovereign debt on the belief that taxpayers would bear the brunt of the refinancing as they had in Spain and Greece (Thomas 2012). Some bought BoC deposits for 20 cents on the dollar and eventually recouped 63 cents of value excluding fresh equity (Forelle 2013), while others purchased uninsured Laiki deposits that remained frozen for years and thus were worthless (Winkworth et al. 2013). The medley of ventures hedge funds undertook in Iceland and Cyprus raises the question: are they inherently negative or positive actors in financial crises?

The Greek PSI was a private restructuring of the country's debt obligations that resulted in a 53.5% write-down of debt or a 70% loss in value for creditors (Eurogroup 2012)

1.1 A STRUCTURALIST MODEL FOR HEDGE FUND ACTORS

There are two main negative critiques of hedge fund influence: they contribute to the build-up of asset bubbles and their excessive leverage coupled with speculative behavior results in market contagion and increased volatility. As this paper focuses on crisis-behavior, I will focus on the contagion volatility critique and argue that contagion and introduction of market volatility is a byproduct of preexisting structural deficiencies rather than the exogenous agency of hedge funds. Defenders of hedge funds typically point to their ability to act as an agents of pricing fidelity or injectors of liquidity. These are valid functions that play out in crises, but in the same vein as the contagion critique, this paper will show that these beneficial contributions are only made possible to the extent permitted by a fund's environment. Ability to inject liquidity in particular is symptomatic of broader systemic dynamics that hedge funds cannot unilaterally create. Furthermore, both of the positive and negative viewpoints critically neglect a comprehensive consideration of antecedent structural elements from the perspective that these structures are the root of hedge fund behavior².

I will thus challenge the notion that hedge funds are fundamentally positive or negative financial actors during crises. Rather, hedge funds follow a structuralist model—the nature of their activities and consequently their influence in society is analogous to fluid conforming to the endogenous institutional contours of its environment. By structures, I am referring to economic, political, and legal configurations that pre-date hedge fund market behavior. As foils to pre-existing fundamental opportunities or deficiencies, hedge funds are neutral, reflexive, and reactionary. They may augment the volatility during the onslaught of a financial crisis but lack the agency to unilaterally create the infrastructure for a crisis. They may fulfill beneficial market functions during turmoil but can do so only to the extent permitted by pre-existing architectures.

I will use the complementary cases of Iceland and Cyprus to illustrate this point and will reference two partners ('Partner A' and 'Partner B') at an interviewed hedge fund source that transacted in both crises. In Iceland, hedge fund activity emerged in three main forms. Initially, the country's sustainably high interest rates galvanized substantial carry-trades, that when unwound, wreaked havoc on the Icelandic króna (Aliber & Zoega 2011). Hedge funds thereafter began shorting the króna in the foreign exchange (FX) markets as well as bank debt through credit default swaps (CDS) (Bergmann 2014). The Iceland hedge fund saga culminated in the brazen 'loan-to-own'³ debt trade, whereby foreign creditors seized control of

² See Palaskas et al. (2013), Stromqvist (2009), and Wiethuechter (2010),

³ Loan-to-own refers to the strategy of purchasing a distressed or bankrupt company's debt at a significant discount to face value and receiving equity post-reorganization, resulting in control of the company and its assets.

the entire legacy banking sector for cents on the dollar and entered into years-long negotiations with the government to lift capital controls and thus monetize the trade (Jónsson & Sigurgeirsson 2017). There was a limited role for hedge funds in sovereign debt given Iceland's healthy national debt levels of 28% of GDP in 2007 (Fitch Ratings 2008).

Hedge fund activity in Cyprus was less extraordinary than activity in Iceland despite surface-level parallels in the opportunity-set. Nonetheless, the Cypriot financial crisis bolsters a structuralism argument, as the lack of hedge fund involvement at the Icelandic scale is rooted in subtle structural differences. Cyprus' significant sovereign debt, international English legal system governing foreign creditors, bank reliance on Emergency Liquidity Assistance (ELA) capital as opposed to private capital, weak insolvency and foreclosure system, and position of the troika as a lender-of-last-resort (LLR) are all crucial structural factors that sculpted the character of hedge fund activities. The three most meaningful hedge fund activities in Cyprus were buying distressed deposit claims, injecting fresh capital in BoC's recapitalization, and investing in sovereign debt, of which the first two provided constructive liquidity in a secondary market to the banking system.

This paper is structured into five parts. Part 1 has been this introduction. Part 2 contains background information on hedge funds and both crises. Part 3 and 4 are analyses of the various hedge fund activities undertaken during the Icelandic and Cypriot crises, respectively, demonstrating how they fit into a structuralist perspective. In Part 5 I will present my concluding thoughts.

2 BACKGROUND

2.1 OVERVIEW OF HEDGE FUNDS

The defining characteristic of hedge funds is that they countervail the U.S. Investment Company Act of 1940 through various legal forms (Brown & Goetzmann 2003); the act prohibits 'investment companies' (e.g. mutual funds) to leverage and short-sell securities (U.S. Congress 1940)⁴. Accordingly, the definition of a hedge fund has become both colloquial and fluid with no concrete boundaries, functioning in practice as a subjective 'smell-test'. Non-investment companies that engage in (1) trading relatively liquid, as opposed to illiquid securities⁵, (2)

⁴ To prevent having their capacities restricted, hedge funds took on three characteristics: (a) lack of access to the general public (Hardie & McKenzie 2006), (b) 'non-solicitation' to potential investors, communicating only by 'word-of-mouth' (Fung and Hsieh 1999, p. 315), and (c) limiting quantity of investors in their funds.

⁵ Distressed debt funds often invest in highly illiquid debt securities and serve as an example of how hedge funds fail to conform to a strict definition or scope of activities.

investing without any regulatory restrictions particularly on asset classes they can pursue, and (3) applying leverage and short-selling, are perceived as hedge funds.

Three forms of hedge funds played roles in Iceland and Cyprus: eventdriven, global macroeconomic, and distressed debt strategies. Event-driven funds focus on hard catalysts to realize value in a trade that can span a firm's capital structure; common wagers include speculating on closure of a corporate takeover, a spinoff that will unlock or destroy value, or declaration of bankruptcy. Global macroeconomic hedge funds buy and sell currencies and sovereign debt, often trading spreads between relative interest-rates. Distressed debt funds, caricatured as 'vulture funds,' buy and sell debt trading at a significant discount to face value due to bankruptcy risk. These three strategies frequently overlap.

2.2 OVERVIEW OF THE ICELANDIC FINANCIAL CRISIS

2.2.1 PRECURSORS TO ICELAND'S FINANCIAL CRISIS

Iceland, a former Danish colony-island that gained independence in 1944, is the smallest-populated country in the world that controls its own currency (population of 330,000). At the turn of the century, Iceland experienced a period of rapid growth driven by desire to join the European Economic Area (EEA). The three major Icelandic banks (Kaupthing, Landsbanki, and Glitnir) were privatized in the 1990s, the króna was floated, and the new government coalition aggressively pursued procyclical fiscal policies (Aliber & Zoega 2011). These three factors would later result in a 'twin crisis' (Kaminsky and Reinhardt 1999) of rapid currency depreciation and a failed banking system without a lender-of-last-resort. This colossal banking system failure was one of the most exceptional financial special situations in decades, causing distressed debt hedge funds to flock to Iceland in a magnitude never before seen.

2.2.2 ICELANDIC BANKS AND THE EMERGENCE OF THE 'VIKING CAPITALIST'

The foundation for the crisis began in 2002, after completion of Iceland's bank privatization process. Formerly benign and domestically isolated banks began transforming into unrecognizable behemoths post-privatization, giving rise to a 'Viking Capitalist' class of risk-takers (Bergmann 2014). They took advantage of globally low interest rates to consolidate both domestically and internationally, resulting in incestuous relationship, bulging balance sheets, and global risk exposure. The undertaking of foreign debt to finance M&A allowed them to grow from less than a single year's GDP in the 1990s to accumulating EUR 115bn of assets on the eve of the crisis (Benediktsdóttir et al. 2017; Bergmann 2014). Many of the assets they acquired with this newfound capital were foreign gems, which

would later become a crux of their restructuring and influence hedge fund behavior⁴. Despite riding on billions in foreign debt, the three banks achieved AAA credit ratings, allowing further access to cheap international debt offerings (ibid). These credit ratings were imprudently supported by the near debt-free Icelandic state, who was assumed to be capable of injecting fresh capital should the banks ever stumble. The triumph of the Viking Capitalists was reflected in the ICEX stock index's nine-times increase from 2001 to 2007 with 70% of its pre-crisis value in financial services (ibid). Thriving equities increased household wealth by 300%, generating a domestic consumption boom facilitated through easy consumer credit (ibid).

2.2.3 The Icelandic Government's Procyclical Fiscal Policies

Simultaneously, the Icelandic government undertook a series of procyclical Keynesian policies to fulfill lofty election promises. Monetarily, this began with the floating of the króna, but soon encompassed a far greater fiscal regime revolving around home ownership and public infrastructure. Property tax was abolished, and the corporate tax rate halved. The Housing Fund provided low rate mortgage support at an unprecedented 90% of market value, often in competition with the big three banks' own mortgage lending, causing home prices to surge and increasing downwards pressure on rates. Several funding programs were passed to build the infrastructure of aluminum production, contributing another 5% to GDP growth (Bergmann 2014). In stark opposition, the Central Bank of Iceland (CBI) was consistently *raising* rates, from 5.3% in 2001 to 15.5% before the crash due to concerns of inflation (CBI Database). This interest rate tension prompted a gargantuan international carry-trade manifested in foreign appetite for Icelandic bank debt; Section 3.1 will elaborate further.

2.2.4 ICELAND'S 2008 'TWIN-CRISIS'

This backdrop of a newly floated currency, emboldened Viking Capitalists pushing the limits of corporate 'outvasion', and aggressive procyclical government policies captures why Iceland's crash occurred as violently as it did, manifested as a 'twin crisis' of both currency and bank failures. Lehman's troubles in 2008 initiated a liquidity crunch for all three of Iceland's banks and they all collapsed in a matter of three consecutive days in 2008 after failing to refinance short-term maturities (Bergmann 2014). The ensuing capital flight pummeled the króna more than 35% against the Euro over nine months and it later bottomed at 80% of its peak value since it was floated (CBI 2008; Burton et al. 2013). As the crisis spread

[•] Examples: Glitnir acquired partial ownership of the HoldCo of American Airlines during this period. Kaupthing bought Denmark's third largest bank (FIH), and Landsbanki acquired eastern European phone companies and pharmaceutical firms (Bergmann 2014).

to Europe and uncertainty penetrated every financial market, the value of the three banks' sprawling network of international assets was increasingly called into question leading to severely discounted bank debt. Landsbanki, more than the other two banks, was under monumental pressure. It had financed its assets with a higher ratio of foreign deposits (as opposed to foreign debt) under the Icesave product, giving rise to a tense political standoff with the UK and the Netherlands on which country was responsible for insuring these foreign deposits. The UK quickly froze Landsbanki's assets under the Anti-Terrorism Act (Bergmann 2014), which caused additional discounts on the value of Landsbanki debt.

In light of these complications, it was economically crucial to allow uninterrupted banking access. Three new banks were incorporated to absorb the domestic operations of Glitnir, Kaupthing, and Landsbanki, the last of which became state-owned. The government, along with a USD \$2.1bn IMF loan, provided the debt to recapitalize the new banks (Bergmann 2014). The equity of the new banks was majority owned by the estates of the old banks. These estates, whose expansive global assets were highly illiquid and impaired, went into the hands of a winding-up board where creditors could make claims on residual value (Moore 2018). The primary creditors at the failed banks were previously European banks who had lent outside the Eurozone to capture higher rates. During the crisis, they hastily exited their positions at bargain prices. This exit effectively transformed the bank debtholders into a new type of sophisticated activist investor that would seek to maximize these estate values to the fullest extent: distressed debt hedge funds (Jónsson & Sigurgeirsson 2017).

2.3 OVERVIEW OF THE CYPRIOT FINANCIAL CRISIS

The Cypriot crisis in many ways emulates what occurred during 2008 in Iceland, only five years later and within the framework of the European Union, which Cyprus joined in 2004. Like Iceland, Cyprus had permitted its private banking sector, composed of Laiki and the larger Bank of Cyprus (BoC), to grow to an unsupportable eight-times GDP by 2013 (Theodore & Theodore 2015). This was encouraged by inordinately high-interest rates (a \$1mm deposit would earn over \$300,000 in interest in five years), increased market access from EU membership, and Russian demand for tax-friendly Cypriot-domiciled business treatment (ibid). Out of the 31bn EUR in bank deposits at Laiki, 12bn were from Russia, with Russian oligarch Rybolovlev even owning 10% of Bank of Cyprus (Theodore & Theodore 2015, p.40; Wilson 2012). These close-ties incited speculation of Cyprus as a money-laundering haven and would later affect the troika's punitive bail-in response.

2.3.1 The Greek Private-Sector Involvement (PSI) and its Effects on the Cypriot Banking Sector

Critically, however, Cyprus' balancing act did not immediately collapse in 2008 after the bursting of the global asset bubble. The country's inclusion in the Euro currency zone protected against immediate and rapid currency depreciation. Cyprus experienced a minor recession caused by a moderate drop in tourism, spurring the government to respond with spending initiatives at the detriment of its fiscal balance. Yet, nothing was done to rein in unconscionable bank debt. Most problematically, Laiki and BoC still held billions of euros in distressed Greek debt and Greek assets on their balance sheets, and at a higher relative concentration than other EU member-states (Theodore & Theodore 2015). In 2011, the country's fortunes rapidly capitulated due to the accidental explosion of the Evangelos Florakis Naval Base, which caused \$3bn USD in damages, turned a mild fiscal surplus into a 6% deficit, and prompted credit downgrades that constricted access to the capital markets (ibid). Consequently, Cyprus received a 2.5bn EUR loan from Russia in 2012 to buttress its fiscal standing without turning to the IMF, but none of these funds were used to recapitalize the banks (ibid). The final blow came in the form of the Greek Private-Sector Involvement plan (PSI), which was manifested in a 53.5% write-down of Greek debt, or 70% value loss (Eurogroup 2012). The result was a 3.5bn EUR erasure of value (approx. 10% of GDP) on Laiki and BoC's balance sheets (Ewing 2012), putting both banks into spontaneous bankruptcy with the nation unable to provide the funds for a bailout.

2.3.2 THE BAIL-IN SOLUTION FOR CYPRUS

The controversial solution adopted for Cyprus was a troika-forced 'bail-in': 10bn EUR of relief funds (9bn EUR from the ESM and 1bn EUR from the IMF) for the banking sector were contingent on applying a haircut to deposits and subsequently converting both domestic and foreign deposits into equity in a reorganized bank (Christou & Kyris 2017; Duve & Wimalasena 2015). This entailed several steps: Laiki's 'good assets' in Cyprus were purchased by BoC for an 18% equity share in the latter (this included deposits under 100,000 EUR), while the 'bad assets', including uninsured' deposits over 100,000 EUR, were left to whittle away in the old and defunct Laiki. Operations in Greece owned by both Laiki and BoC were sold to Greek bank Piraeus; the few junior bondholders in both banks were written down to zero; lastly, a levy of 9.9% was applied to all uninsured rolled up BoC deposits over 100,000 EUR and a 6.75% levy was applied to deposits under 100,000 EUR (Theodore & Theodore 2015). This levy was applied by

⁷ Uninsured refers to deposits over 100,000 EUR

reducing the amount of equity deposit holders received in the deposit-to-equity conversion. Sovereign bondholders in upcoming maturities were paid off in full using a combination of these depositor contributions and troika assistance (ibid). The economic cost of this maneuver was substantial. GDP in the latter half of 2013 declined 5.9% and unemployment increased to 16.9% as the country lost faith in its banking system and consumer confidence bottomed (Christou & Kyris 2017). Hedge funds were involved in all three types of securities in the bail-in maneuver. First, they bought out frozen deposits themselves primarily in BoC before the announcement of the bail-in. Second, they contributed cash for fresh equity in the recapitalized banks. Finally, they bought sovereign debt on the belief that a Greek-style write-down would not occur, and creditors would be made whole notwithstanding the dire economic situation.

3 ANALYSIS OF HEDGE FUNDS IN ICELAND

3.1 THE CURRENCY MARKET: CARRY-TRADES AND SHORTING THE KRÓNA

Global macroeconomic hedge funds transacted in the Icelandic currency market in the period surrounding the crisis through two primary ways: carry-trades and shorting the króna. Both activities have received considerable negative criticism for introducing heightened volatility into the financial system, stimulating contagion, and thus contributing to the twin-crisis. Ironically, the two activities are contradictory as carry-trades imply longing the króna, which should immediately warrant skepticism of the validity of the critique. Nevertheless, I will illustrate why both the carry-trade and shorting the króna are phenomenon that can be explained by deeper endogenous structural factors rather than the exogenous agency of hedge funds.

3.1.1 Overview of the Carry-Trade

A carry-trade involves cross-border investments in high-interest rate countries funded by capital from a low-interest rate country (Aliber & Zoega 2011). In Iceland, there were two methods of capturing the interest-rate differential: through buying medium-term 'glacier bonds' issued by the banks starting in 2005 or through derivatives (forwards and options) (ibid). Any financial actor, even retail investors, could feasibly perform the 'glacier' trade. This is where the 'Belgian dentists' and 'Japanese housewives' tropes developed (Bergmann 2014), as

^s The global popularity of glacier bonds created the trope that even ordinary professionals across the world were buying Icelandic debt.

international retail investors ploughed an estimated 2.9bn EUR into glacier-bonds (Aliber & Zoega 2011).

Global macroeconomic hedge funds employed the same fundamental principle but differed in that they typically utilized derivatives to leverage these transactions to stake larger positions. This occurred through borrowing from their domestic low-interest rate bank and subsequently partnering with an Icelandic bank to swap out the currency exposure. This transaction was high-risk for both counterparties. Hedge funds only attempted this trade if the Sharpe ratio^o exceeded their fund's cost of capital, while Icelandic banks indiscriminately accepted carry-trades to benefit from receiving massive króna deposits to fund domestic investment (IMF 2007). Icelandic bank exposure to these types of foreign-denominated derivatives grew to a material 69% of GDP pre-crisis (Aliber & Zoega 2011).

Initially, the trade exhibited a steady yield as the króna gradually appreciated 35% against the Euro from 2000 to 2005 (Aliber & Zoega 2011). However, the dynamic rapidly unwound with the introduction of speculative currency-volatility. Traders moved in early-2006 to close leveraged positions amid a reduction in risk appetite and global liquidity fears, forcing a self-fulfilling prophecy of accelerated króna depreciation. This event-path has been referred to in academia as 'going up the stairs, coming down the elevator' (Plantin & Shin 2006; Ferguson et al. 2007). It may appear then, that these hedge funds via leveraged carry-trades exerted an independent negative destabilizing force on the Icelandic macroeconomy. This is a tempting, yet simplistic conclusion. The reality is that several structural factors pre-dated these carry-trades, the most significant being (1) globally depressed interest rates, (2) Iceland's divergent monetary and fiscal policy, and (3) Icelandic bank demand for mortgage funding in the midst of a housing bubble. The carry-trade is the natural manifestation of these structures.

3.1.2 Structural Contours that Shaped the Carry-Trade and Shorting the Króna

The carry-trade requires a dual-dynamic of low global interest rates with pockets of high-yielding investment opportunities. Correspondingly, there are two spheres of structural factors: those in an investor's domestic country and those in the foreign country. The effect of pre-2008 globally low interest-rates on the creation of international asset-bubbles is extraordinarily well-researched and agreed upon as a driving structural feature in the accumulation of carry-trades and asset bubbles through investor 'reach for yield' (Bean et al. 2015). There is strong

[•] Interest-rate differential divided by expected volatility of the exchange rate. Higher Sharpe ratios indicate more lucrative carry-trade opportunities.

evidence for this in that the króna and other carry-trade targets (e.g. the New Zealand dollar) experienced significant degrees of co-movement pre-crisis (Portes & Baldursson 2007). However, this does not single-handedly explain why Iceland in particular was so exceptional as a carry-trade destination versus alternative countries.

The primary idiosyncratic structural feature that stands out in Iceland's case is the stark contrast between monetary and fiscal policy. As described in Section 2.2.3, Iceland's government was undertaking procyclical fiscal policies to fulfill election promises, while the CBI was simultaneously raising rates. An imbedded driver of this dynamic was the CBI's tacit commitment to a strong króna. Despite the CBI not having a formal exchange rate policy goal, it has been quoted multiple times as remaining faithful to propping up the exchange rate to stave off inflation (CBI 2007). In early 2006, when the króna first faced challenges, the CBI immediately raised rates forcefully and asserted its pledge to a higher exchange rate consistent with inflation goals (ibid). Effectively, by communicating that the exchange rate was one-to-one with inflation targets, the CBI constructed the architecture for a (perceived) sustainably high Sharpe-ratio carry-trade by reducing the market's forecasted volatility of the króna. There is evidence of this in the lack of the central bank's exchange-rate fixation in other carry-trade destinations. New Zealand's central bank, for example, explicitly abandoned direct focus on the exchange rate in the early 2000s to counteract these types of currency market distortions (McDermott & Williams 2018); accordingly, criticism of carry-trading macro hedge funds in New Zealand is unheard of because they were not as deployed as they were in Iceland.

In addition to globally depressed interest-rates and divergent monetary and fiscal policy, Icelandic bank demand for domestic mortgage financing was crucial in facilitating elevated carry-trade volumes, leading some scholars to argue that this demand-side factor exerted a greater influence than the supply-side of hedge funds hunting for yield (Portes & Baldursson 2007). There was a clear governmentconceived structure that fueled the ballooning domestic demand for mortgage financing: the 2003 increase in the Public Housing Fund's max loan size to 90% of a home's market value (Bergmann 2014). The raising of the max loan clause pitted domestic banks against the state housing fund, which had an incentive to live up to housing-based election promises under the newly elected Progressive Party. To properly compete, the banks both lowered their mortgage rates and welcomed foreign capital from the carry-trade with open arms to meet volumes. This further augmented the tension between the CBI's rate-raising and the activities of government and private mortgage financiers. The bank's exposure to currency forwards and options from hedge funds in the carry-trade would have never approached 69% of GDP levels if appetite for mortgage financing had been reigned in to conscionable levels.

In most respects, the structural rationale for shorting the króna is the same for that of the carry-trade. However, hedge funds that went short concluded that the opposite effect would occur. They saw the structures of Iceland's global interestrate differential, monetary and fiscal policy divergence, and surging mortgage financing demand as an unsustainable framework due for inevitable correction. Therefore, hedge funds short the króna coexisted with investors participating in the carry-trade and were also a derivative of structural elements. However, the influence of 50 or so global macroeconomic hedge funds shorting the króna in 2006 (Jónsson & Sigurgeirsson 2017) is not an exogenous causal factor in the króna's 2006 and 2008 violent course-reversals - the unsustainable structures themselves are. There is the counter-argument that short interest in the króna contributed to the accelerated rate of currency depreciation and that structural reforms could have been gradually implemented with lower economic costs (Stromqvist 2009). However, this argument fails to consider that a correction was structurally unavoidable, and that delaying a reversal would have time-value costs of its own. Furthermore, by acknowledging that 'structural reforms' are the root solution to the currency imbalance, the critique implicitly concedes that hedge funds are not at the core of the problem.

3.2 THE DISTRESSED DEBT MARKET: PURCHASING BANK CLAIMS

While the carry-trade and currency shorting were ammunition for negative critics of hedge funds in Iceland, it was by no means idiosyncratic. As discussed, there is evidence of repetition in the enabling structures of the carry-trade in other countries (e.g. Australia and New Zealand). Where Iceland becomes truly exceptional as a hedge fund epicenter is in its unparalleled bank failures and ensuing capital controls, a saga ripe with financial, legal, and political complexity. It is evident that any opportunity for distressed debt hedge funds in Icelandic bank debt was contingent on innumerable structural dynamics. The three most crucial were (1) the initial capitalization and debt ownership of the banks that defined the extent to which hedge funds could participate, (2) the contemporary neo-liberal legal frameworks that allowed for flexible liability restructuring, and (3) the 'Sir Philips' effect¹⁰ (Jónsson and Sigurgeirsson 2017) of severe asset mispricing driven by systemic uncertainty and diverse asset complexion. While this paper argues that hedge funds are neutral actors coat-tailing pre-determined structures, the positive liquidity effect of their involvement here is worth considering to underscore the importance of curating advantageous structures.

[&]quot;Named after Top Shop founder Sir Philip Green, who offered to buy Baugur's debt for 5 cents on the dollar in 2008. Baugur was the largest Icelandic holding company, a major Glitnir shareholder, and had Landsbanki as its largest creditor (Jónsson & Sigurgeirsson 2017).

3.2.1 Overview of the Distressed Bank Debt Trade

When Glitnir, Landsbanki, and Kaupthing collapsed in early 2008, existing creditors primarily composed of European banks (Germany owned 50% of the debt) (Jónsson & Sigurgeirsson 2017) immediately went to the markets to exit their debt ownership in the November CDS auction. It was at this auction that hedge funds first bought into Icelandic bank debt — at 6.625% of face value for Kaupthing, 3.00% for Glitnir, and a mere 1.25% for Landsbanki due to the Icesave issue (see Section 2.2.4) (ibid). Meanwhile, the government recognized that it was vital for banking services to remain uninterrupted. Unilateral emergency legislation was passed to form 'new banks' that retained their banking licenses based on extremely conservative asset valuations of the 'old banks'. Rather than recapitalize the new entities with debt, the estates of the failed 'old banks' were given equity and performance bonds to share in any upside resulting from asset monetization and revaluation. The performance bonds leveraged the returns that the estates would receive if the equity of the new banks appreciated— further increasing the attractiveness of claims on the estates to vulture investors.

For the failed 'old banks'' estates, the Financial Services Authority (FSA) of Iceland appointed autonomous winding-up boards to maximize residual asset value to creditors. Creditors subsequently filed over 50,000 claims amounting to 112bn EUR, of which half were accepted by the boards (Jónsson & Sigurgeirsson 2017); the claims process was the second major entry-point for hedge funds. At first, valuations conducted of the estates found that even the priority deposits (e.g. Icesave, Icelandic depositors) were impaired¹¹, leaving zero value for creditors. Yet, as the UK's economic situation began to improve in the second half of 2009, valuations quickly rose due to the estates' ownership of several valuable international retail assets. Once it became clear that foreign hedge funds owned the increasingly valuable leveraged equity of the new banks through the estates, capital controls were installed to prevent currency flight from the claimants. It took major concessions years later in 2015 — around 6bn EUR worth — of domestic krónabased assets for the hedge funds to negotiate a capital controls lift to monetize their stakes in the 8.8bn EUR of remaining foreign assets (ibid).

3.2.2 PRE-EXISTING ICELANDIC BANK CAPITALIZATION AND DEBT OWNERSHIP

The pre-existing capitalization and debt ownership of the three Icelandic banks is the principal antecedent structural feature that permitted the distressed bank debt trade to function. All three Icelandic banks were financed largely by

[&]quot; Securities are impaired when the total value in a liquidation is not enough to cover their face value, causing a recovery less than 100% including any equity conversion.

private debt issuances and wholesale funding. Of the claims lodged against the estates, only 3.3% and 0.5% were priority deposits for Glitnir and Kaupthing, respectively (Jónsson and Sigurgeirsson 2017). Landsbanki's claims were 43% composed of priority claims due to the Icesave product (ibid). Post-crash, the fulcrum security¹² in the capital structure for all three banks walked the line between priority deposits and these debt issuances. Because the fulcrum was not clearly deep into priority deposits or subordinated debt, there was ample speculative opportunity as any residual value past the priority deposits would accrue to the debt securities. The speculative option-value of the claims was bolstered by the inclusion of the performance bonds mentioned in Section 3.2.1. During an interview on November 23⁴⁴, 2018, a confidential distressed debt hedge fund source who had invested in Iceland spoke to the relative unattractiveness of Landsbanki debt due to its increased proportion of deposit funding, reinforcing the claim that capital structure composition was a key structural factor in hedge fund involvement:

"Landsbanki downside was much higher because depositors were the biggest piece of the liability structure. We had a tiny position in Landsbanki, but we always felt that the risk-reward was much better for Kaupthing and Glitnir because there was little chance you could be a zero on the page." – (Hedge Fund Partner A, personal communication, 23 November 2018)

Initially, the resolution committee's valuation of Landsbanki only covered 90% of the priority deposits (Jónsson & Sigurgeirsson 2017), resulting in the 1.25% debt settlement price at the 2008 CDS auction. The low-price represented potential option-value if the valuation increased but mainly reflected the potential to 'be a zero on the page' as a residual debt claimant. Debt prices were moreover suppressed from their pre-crisis ownership in the hands of low-risk European banks with liquidity needs of their own. This added a 'fire sale' component to the debt transfer from bank investors with low illiquidity tolerance to flexible capital distressed hedge funds where illiquidity is a primary risk factor driving returns (Smaal 2017). Therefore, existence of neoliberal financial structures, such as CDS auctions, have beneficial liquidity effects for both parties. As will be seen in Cyprus, the absence of these structural elements in the initial capitalization of the banking sector limited the ability of distressed debt hedge funds to be involved and depressed returns for those that did.

¹² The fulcrum security is the tranche of debt in the capital structure that is the first to not receive a 100% recovery; also referred to as where the 'value breaks'.

3.2.3 Icelandic Neo-Liberal Legal Structures Governing Bankruptcy and Debt Restructuring

The neoliberal legal regime surrounding debt restructurings in Iceland was another important structural feature that gave foreign hedge funds increased comfort in deploying generous capital in the estates of the failed banks. Icelandic insolvency law is modeled after English bankruptcy law, colloquially called the 'London approach'. The regime, similar to other leading insolvency jurisdictions, allows for the neoliberal concept of liability restructuring as opposed to strict liquidation or punitive debtor measures. In addition, the London approach has historically been considered creditor-friendly in comparison to U.S. Chapter 11's debtor-in-possession structure (the main competing jurisdiction for insolvency business), especially in regard to secured creditors. Investment risk for hedge funds in Iceland was therefore lowered given there was a proven, renown, and creditorcentric insolvency framework already in place.

The specifics of Icelandic law itself provided appealing flexibility on the resolution of the estate claims. The three methods to conclude a winding-up process in Iceland are: (1) returning the assets of the estate to the shareholders (only valid if creditors are paid in full), (2) reaching a CBI-approved composition agreement with creditors to write-down their debt claims and take equity in the estate, and (3) liquidation of assets, distributing proceeds to creditors (Jónsson & Sigurgeirsson 2017). Option (2) is functionally similar to reaching a confirmed reorganization plan within U.S. Chapter 11- creditors must consent proportionately to their recoveries (e.g. in Kaupthing, if debt recoveries were 30%, then 70% must consent) and reach a minimum of 60% of creditors by both value and number of claims. Composition can also incorporate aspects of liquidation if there are opportunities to sell specific assets at attractive valuations; this would be accretive to the recapitalized equity value of the estates. Complete liquidation (3) might have also been a feasible option in Iceland given the unique nature of banks' assets that had potential to fetch relatively high sale prices given market conditions (see Section 3.2.4). However, complete asset liquidation is less flexible than composition and therefore less likely to maximize creditor value, especially when assets are illiquid and do not have immediate markets for valuation purposes. Indeed, the interviewed hedge fund source stated that part of the rationale for assigning a 'risk premium' to the bank debt trade was the possibility of a sloppy asset liquidation where asset value failed to be maximized (Hedge Fund Partner A, personal communication, 23 November 2018).

Due to the capital controls battle with the Icelandic government, the composition tool became the preeminent legal method to secure concessions for each party in light of the uncertainty of liquidation payouts. The agreement allowed for inclusion of a stability levy to lift capital controls, and simultaneously allowed hedge funds to monetize 8.8bn EUR of non-ISK assets. This prevented material damage to the country's balance of payments while remaining a favorable deal for hedge funds. It is unlikely that hedge funds would have become so deeply invested in the bank debt if this legal framework to conclude an insolvency process failed to exist in Iceland. The legal structures in Central and Eastern Europe (CEE), for example, have been found to suffer from the lack of business norms surrounding corporate restructuring, and would likely garner capital investment benefits from implementing similar structures (Bufford 1996). This is a critical reason for why hedge funds choose to be involved in CEE countries less frequently.

3.2.4 The 'Sir Philips' Effect of Severe Asset Mispricing and Diverse International Asset Complexion

The final structural component that differentiated the Icelandic banking situation for hedge funds was the unique asset complexion on the banks' balance sheets. Aside from accumulating substantial foreign deposits in the lead up to the crisis as discussed in Section 3.1, the banks were lauded for their debt-financed corporate buyout wizardry, especially Kaupthing. The bank first achieved international fame from the panache of its debt-financed net 950bn EUR acquisition of FIH in 2004, the third largest Danish bank (Jónsson & Sigurgeirsson 2017). This acquisition doubled its balance sheet and amounted for 4% of Iceland's GDP, yet nonetheless, credit agencies upgraded Kaupthing credit post-closing (ibid). The FIH acquisition was just the beginning – Kaupthing went on to purchase Norwaybased Sundvall in 2004, a 20% stake in the Indian Finoble Advisors, UK firm Singer & Friedlander in 2005, and Belgian bank Robeco in 2007 (ibid). In 2007, on the eve of the crisis, Kaupthing launched Kaupthing Edge through Singer & Friedlander, an internet-based European deposit-product, which grew to 2.5bn GBP of foreign deposits (Anderson 2008). While foreign European banks were opposed to investing in the equity of risky corporate chess play, they were extremely willing to lend debt in the deals collateralized by equity in the target. Subsequently, Kaupthing would list a portion of the equity of the acquired subsidiary on the ICEX, in turn receiving additional cash for the next acquisition. The end-result was that 90% of Kaupthing's assets by book value were outside Iceland and European banks held the majority of its debt (ibid).

Baugur Group, the largest Icelandic holding company and one of the largest shareholders in Glitnir, also embarked on an unprecedented international investment spree. Baugur had majority and minority stakes in Iceland (the frozen food retailer), jeweler group Aurum Holdings (owns Goldsmiths, Mappin & Webb, and Mosaic Fashions), House of Fraser, Hamleys, West Ham United, Somerfield, Iceland Foods, the fashion chains All Saints, Oasis and Karen Millen, and pubs Slug & Lettuce and Yates (Bowers 2011; Jónsson & Sigurgeirsson 2017). Indirectly, Baugur was responsible for 53,000 UK jobs (Jónsson & Sigurgeirsson 2017). The largest creditor in Baugur's capital structure turned out to be Landsbanki (ibid), and when Baugur's leveraged capital structure came under pressure, Landsbanki maneuvered to take administrative control of its assets. Thus, the valuation of Baugur's assets became a key determinant of Landsbanki debt prices.

The significance of the international asset portfolios of the failed bank estates was twofold. First is a mispricing effect, in that they were intrinsically valuable assets under temporary economic pressures from the global financial crisis; the second was that the bulk of foreign-assets over domestic Icelandic assets mitigated the already substantial risk exposure from króna weakness (absent the capital controls issue). In regard to the first idea, Jónsson and Sigurgeirsson call this temporary pricing pressure the 'Sir Philips effect', after the Top Shop founder Sir Philip Green, who offered to buy Baugur's debt for 5 cents on the dollar in 2008. The audacity of Sir Philip's offer lies in its flagrant undervaluation of the estate's assets; most practitioners would arrive at a far higher valuation than his offer by performing a sum-of-the-parts going-concern valuation of the web of investments contained in each of the three Icelandic banks' balance sheets. For example, in the initial panic, Glitnir's Norwegian subsidiary was sold for 35mm EUR, or 10% of its book equity value. Only one month later, it was worth 236mm EUR on the balance sheet of its acquirer (Jónsson & Sigurgeirsson 2017). Even the Chairman of the Progressive Party at the time (and later the PM under the capital controls saga), Sigmundur Davíð Gunnlaugsson, called for the government to buy the debt of the estates at 1-5 cents on the dollar while they were mispriced (Moore 2018).

In the hedge fund industry, this form of mispricing is referred to as a wealth transfer from impatient to patient hands. Through patient asset monetization in a recovering global economy, hedge funds could slowly convert these illiquid stakes in valuable European brands into liquid foreign-currency denominated assets. The added benefit was that, once liquidated, the assets could be reliably valued in stable foreign currency; this ended up amounting to 8.8bn of foreign assets, 6bn of which was liquid as early as 2012 (Jónsson & Sigurgeirsson 2017). Without this defining structure, the risks in the bank debt would have been incrementally greater and hedge funds would have invested less than the billions of dollars they did put on the line. This is evidenced in other Eurozone crisis economies, such as Spain and Ireland, where bank assets were confined to the domestic domain, e.g. domestic mortgage loans (Buck 2017; O'Sullivan & Kennedy 2010). In those countries, a recovery in the asset values was far more correlated to a recovery in the domestic economy and the housing market, in comparison to Iceland, where bank recoveries hinged on the UK retail sector and specific corporate investments. Therefore, while hedge funds provided substantial liquidity through bank claims in Iceland, this was provisional on the unique quality and geographic diversification of the underlying assets.

4 ANALYSIS OF HEDGE FUNDS IN CYPRUS

4.1 DISTRESSED CYPRIOT BANKS: PROVIDING LIQUIDITY TO FROZEN DEPOSITORS AND RECAPITALIZING BANK OF CYPRUS

In many ways, hedge funds yearned to get involved in the Cypriot financial crisis to the extent that they did in Iceland. First, they investigated the possibility of freeing frozen deposits in both of the failed banks, Laiki and BoC, a potentially lucrative trade given the liquidity needs of depositors and the protracted resolution timeline. However, due to the structural elements of (1) European animosity towards perceived Russian malefaction, (2) high-fixed legal costs of buying out miniscule retail deposits, and (3) legal uncertainties on transferring deposit interests, this trade did not approach material levels. Still flirting with the possibility of a brighter future for the banking sector, some hedge funds bought equity in the rolled up Laiki and BoC combination ('new BoC'). Due to lackluster foreclosure laws, non-performing loans (NPLs) continued to rise on the balance sheet of new BoC, causing the bank's equity to fall substantially. It appears that the sole winning hedge fund trade in Cyprus was buying sovereign debt. Again, the structure of English bankruptcy law lent a helping hand to foreign creditors, as did the Cypriot banking sector's ownership of the sovereign debt. This legal system prevented Cyprus from forcing a Greek-style debt write-down. The disparate activity levels of hedge funds among these three trades – buying out frozen deposits, purchasing recapitalization equity, and going long sovereign debt- confirms the presence of key structures as a driving force in how, when, and why hedge funds transact during crises.

4.1.1 Overview of the Distressed Deposit Trade

Post Greek-PSI, Cyprus agreed to several conditions to receive its 10bn EUR recovery package from the troika, collectively referred to as 'the bail-in' (see Section 2.3.2). This included capital controls, austerity measures (e.g. property and corporate tax increases), and a significant restructuring of Laiki, BoC, and smaller regional banks. While a 9.9% and 6.75% tax levy in the form of a 37.5% deposit conversion into recapitalized equity was eventually applied to BoC deposits over and under 100,000 EUR (Theodore & Theodore 2015), respectively, this was the result of a years-long negotiation process and Cypriot parliamentary approval. Additionally, uninsured Laiki depositors were left out of the deal, frozen in the 'bad bank' whose primary asset was the 18% equity share in BoC; these are believed to have been effectively written-down to zero. This time of uncertainty presented a tactical opportunity for hedge funds, with flexible capital bases and institutional expertise, to buy out deposits in Laiki and BoC at steep discounts. If the deposit

was purchased at a discount to the ultimate levy, the hedge fund would profit. For example, a BoC deposit over 100,000 EUR purchased for 20 cents on the dollar would net a 182% gross return¹³, not accounting for time value of money and excluding the fresh equity in BoC. An insured deposit bought out in Laiki, however, would be worthless.

4.1.2 Structural Contours that Shaped the Distressed Deposit Trade

The first critical structural element that provided for the distressed deposit trade was the converse of what existed in Iceland. The existing capitalization of Laiki and BoC had virtually nonexistent senior debt. In Laiki, deposits accounted for 17.9bn EUR or 59% of the bank's liabilities, with the second largest security in the liability stack being ELA funding at 10.2bn EUR or 34% of liabilities (Cotterill 2013). Laiki's minimal ~100mm EUR in senior debt was illiquid due to concentrated private ownership (Hedge Fund Partner A, personal communication, 23 November 2018). Thus, it was in practice cost prohibitive to buy into the senior debt. Furthermore, this capital structure led hedge funds to believe that the fulcrum clearly existed somewhere in the deposit and ELA liabilities; ELA funding was likely to roll over given the troika's continued bail-in contingent support. This dynamic elevated deposits to the forefront of hedge fund interest.

On the supply side, serious uncertainty was required to convince depositors to part ways with their stakes for severe discounts. The political wrestling with the troika provided plenty of unpredictability. At times, the media even reported that the levy could approach 30% or 40% of deposits (RT 2013), and indeed, Laiki depositors above 100,000 EUR lost their entire stake in the final form of the bailin. This uncertainty and the divergent outcomes of depositors in Laiki and BoC were key factors for hedge funds in analyzing the deposit trade and this was corroborated by the interviewed hedge fund source (Hedge Fund Partner B, personal communication, 23 November 2018). Thus, a pattern emerges where hedge funds invest when uncertainty is highest, and securities are at their most ambiguous points as this opens up the doors to possible excess returns.

At the same time, however, several structural features prevented this trade from achieving higher volumes and becoming a full-fledged liquidity boon for deposit holders. The most significant appears to be the potential culpability resulting from buying tainted Russian deposits. It is unclear to what extent deposits were actually corrupted by money-laundering and other schemes. Yet, the highprofile incident of a Russian lawyer's¹⁴ exposure of \$230mm USD in Russian officials' tax fraud— \$30mm of which was funneled through Cyprus

^{[((100 - 9.9 [}levy]) * (1 - .375 [equity conversion])) / 20] - 1 = 182% cash return

¹⁴ Sergei Magnitsky was the general council at a Russia-based hedge fund, Hermitage Capital.

When he exposed the tax fraud scheme, he was jailed and died in Russian prison.

— exacerbated existing concerns and fueled speculation as to the extent of 'dirty money' in the deposits (Belton 2013). European and German emphasis on this issue, particularly as Merkel was up for re-election in September 2013, became a material deterrent for hedge funds looking to buy out larger enterprise deposits. As mentioned in Section 2.1, hedge funds typically evade the limelight. Thus, this risk factor was vital deterrent for some funds including the one interviewed:

"Cyprus had been used for years as an entity to funnel money into Europe. Whether or not that actually was 'dirty' money is another question. However, there is certainly high suspicion that some proportion of it is not clean. That backdrop was important for us as we looked at the Cyprus situation." (Hedge Fund Partner A, personal communication, 23 November 2018).

Excluding these potentially tainted large enterprise deposits left only small retail deposits primarily composed of Cypriot citizens' savings. Larger wealthy retail depositors approached by hedge funds were reluctant to pay the steep discounts, driven by the illiquidity premium, demanded by the hedge funds (Forelle 2013). Additionally, there were several legal complications involved. For one, the ability to transfer legal ownership in a deposit within Cypriot law was a dubious necessity for the trade to function (Winkworth et al. 2013). It appears a few players were able to work around this by creating investment holding companies to purchase diversified equity in Cypriot-domiciled businesses whose sole assets were deposits (ibid); this, however, still runs into the 'tainted money' issue. Others attempted to draft participation structures that allowed sharing in the economics of a freed deposit without ceding legal ownership of the deposit (ibid). These contracts were inherently one-off solutions and entailed sizeable upfront fixed legal costs. Therefore, it is evident that there is a heightened tension between potentially massive returns garnered by providing liquidity to the banking system, and several political, legal, and economic structures that introduced additional risk premia into the trade dynamic. This tension prevented the frozen deposit trade from ever gaining material trade volume.

4.1.3 Structural Contours that Shaped the Bank of Cyprus Recapitalization Equity Investment

Hedge funds continued to speculate on the fate of the Cypriot banking sector after the rollup of Laiki and BoC. The primary structures that induced hedge funds to get involved in the reorganized (reorg) bank's equity was (1) the bank's strengthened market position from elimination of the competitive banking duopoly and (2) its fortification with recapitalization funds from both the conversion of deposits to equity and 10bn EUR in troika funds. Furthermore, many funds saw the equity as heavily discounted due to the structural ownership imposed by the bailin. Cypriot citizens and Russian enterprises who had parked cash in the banking system suddenly were holding 64% of new BoC's risky reorg equity (Demetriou 2017) and quickly moved to dump their shares on the secondary market. This was erroneously perceived as a fire sale by some hedge funds that used the opportunity to purchase fresh equity. Lamesa Holdings, Tyrus Capital, and American investor Wilbur Ross together deployed over 500mm EUR in new BoC equity, making most of their positions in late 2013 to 2015 (ibid).

However, as in the deposit trade, there were structural elements that caused apprehension among hedge funds considering buying reorganized equity in new BoC. The most significant appears to be Cyprus's mixed legal system of commonlaw and civil-law, which contained weak foreclosure and insolvency laws. The IMF and ESM had long been concerned with this system (IMF 2014; Cyprus Mail 2018), citing that weak enforcement laws have caused home foreclosures to take years. Furthermore, the procedure for transferring title deeds was cumbersome, and in the flurry of the 2013 crisis, this 'trapped' many home buyers into property they no longer held legal title to (ibid). The courts were ill-equipped to handle the uptick in these cases, incentivizing widespread strategic defaulting on mortgages before Cypriot law could be modernized. The interviewed hedge fund had undertaken a deep analysis on these issues. Their view was that, due to these legal and bureaucratic structural frictions, strategic defaults would drive non-performing loan exposure at new BoC to continue to climb post-reorg absent any government reform (Hedge Fund Partner B, personal communication, 23 November 2018). This view later proved to be correct, and BoC's share price since the second half of 2013 has fallen substantially. NPLs from 2013 to 2014 grew from an already massive ~53% of the balance-sheet to above 60% (Simões 2017)¹⁵. Thus, while hedge funds were involved in this reorg equity, the involvement was limited due to the risk introduced by outdated legal structures. It appears that, had Cyprus's convoluted legal system for foreclosures and insolvency been updated pre-crisis to more aggressive modern English standards, more hedge funds would have invested in new BoC's equity.

¹⁵ It is worth noting that the NPL proportion at BoC has since come down to ~40% despite their initial rise in 2013 – 2015. This is partially attributable to the passage of new foreclosure laws in 2018. However, this has occurred too late to benefit the equity prices, which fell a further 50% in the last year alone even after a 25% rally in shares after passage of the new law (Yahoo Finance 2018)

4.2 THE SOVEREIGN DEBT MARKET: BUYING CYPRIOT DEBT PRE-BAIL-IN

4.2.1 Overview of the Cypriot Sovereign Debt Trade

The primary widespread successful hedge fund trade in Cyprus was hedge funds' purchase of distressed sovereign debt. Pre-bail-in, the 2020 bonds were trading around 75 cents on the dollar. This price reflected the market's subjective probability estimation that the troika would enforce a Greek-style PSI debt writedown in Cyprus, causing the sovereign debt to take a material hit. However, due to several idiosyncratic structural factors at play in Cyprus, some hedge funds had reason to believe that a PSI would not occur. In the words of Buchheit et al., due to these structures, it seemed that European officials would yet again "steel their hearts against the pleas of the old age pensioners, the unemployed, the homeless, the sick, the blind and the lame in bailout recipient countries" to protect some "hedge fund manager in Greenwich, Connecticut who [held] the country's debt obligations" (Buchheit et al. 2013).

Firstly, the baseline bailout scenario was a relief package where, by necessity, *some* group would be forced to take a write-down. As in the deposit trade, this was due to the appearance of questionable Russian financial activity in Cyprus and mounting political pressure in Germany during an election year. Accordingly, the 17bn EUR in funds Cyprus needed for its banking sector was never going to be fully available from European sources alone. The 7bn EUR in funds beyond the 10bn EUR that the troika eventually promised had to be covered by one of the following groups: (1) domestic sovereign bondholders, (2) foreign sovereign bondholders, (3) bank depositors. As discussed, the last, bank depositors, ended up providing the windfall for the gap. Hedge funds that correctly determined that sovereign bondholders would be made whole ended up earning an approximate 33% in absolute returns¹⁶ in a very short period of time.

4.2.2 Structures Preventing an Effective Write-Down Domestic and Foreign Sovereign Creditors

It was well-known by the markets that the largest domestic Cypriot sovereign bondholders were Laiki and BoC themselves (Cotterill 2013). As Partner B at the interviewed hedge fund noted:

"The interlinkages between the banks and the sovereign was incredibly close. The banks were the biggest owners of sovereign debt, and so you create this

¹⁶ 100 / 75 - 1 = 33%

circle that becomes very quickly quite vicious." (Hedge Fund Partner B, personal communication, 23 November 2018)

This ownership structure caused a domestic sovereign bondholder writedown to be a zero-sum contribution for the Cypriot economy. Thus, Cyprus turned to the possibility of writing down foreign bondholders in the same manner as the Greek-PSI. In 2012, Greek bonds traded to a low of 12 to 13 cents, with many believing that Greece was likely to leave the Eurozone (Thomas 2012). Hedge funds scooped up this debt, which was paid out at 33 cents on the dollar after 97% of creditors approved the restructuring plan (Buchheit et al. 2013). A key lever for the Greek government was the legal structures governing the bonds. The local law had collective action clauses, allowing Greece to threaten to force bondholders to accept lower recoveries. Cyprus, however, crucially lacked these collective action clauses in the law governing its sovereign debt. The creditor-friendly English bankruptcy law in adopted in Cyprus, in part to reinforce its status as a global banking regime, prevents the government from imposing any losses on foreign creditors. Additionally, hedge funds are more likely to be holdout creditors than other types of foreign investors (such as sovereign wealth funds, foreign banks, or retail investors) due to their loose mandates and malleable legal structure discussed in Section 2.1 (Buchheit et al. 2013). In Greece, a fund called Dart Management was a holdout in the PSI and later received a full recovery (Thomas 2012). Cypriot gas reserves (see next section 4.2.3) provided ample reason to believe that these types of holdouts would be more prevalent than even in Greece due to the speculative option-value of these reserves. Thus, the inability of Cyprus to threaten use of a collective action clause both decreased the effectiveness of a PSI in terms of potential quantum of debt write-down and raised the probability of holdout creditors.

4.2.3 POTENTIALLY VALUABLE NATURAL GAS RESERVES EMBOLDENED HEDGE FUND CREDITORS

Aside from the legal structures governing foreign creditors in Cyprus, hedge funds had yet another reason to be optimistic in holding sovereign debt: the Aphrodite gas fields off the Cypriot coast. Valuable natural resources, even those that are yet to be in the development stage of their lifecycle, can be a godsend for creditors. This value is evidenced in less-developed countries (LDCs) recent utilization of natural resource reserves as collateral for loans to achieve cheaper funding (Halland & Canuto 2013). For Cyprus, the net revenues that could be produced by the Aphrodite natural gas reserves were estimated to be able to cover a third of Cypriot sovereign debt (Joy 2013). Thus, many hedge funds believed they could seize control of the reserve assets to bolster their debt recoveries (Hedge Fund Partner A, personal communication, 23 November 2018). At the minimum, this might encourage them to holdout in any Cypriot PSI.

Therefore, hedge fund holding of sovereign debt was unmistakably a derivative of these structural features: primarily the inability to write-down both domestic and foreign bondholders, but also the presence of a crown asset off of the country's coast. Without these structures, hedge funds would have scant reasons for investing in the sovereign debt of a country on the verge of bankruptcy.

5 CONCLUSION

Using Iceland and Cyprus as case studies in hedge fund actors during financial crises, I have demonstrated that hedge fund involvement is contingent on antecedent structural factors rather than exogenous agency. In other words, the notion that hedge funds may one day simply decide to unilaterally "make a last stab at breaking down [a] financial system," in Oddsson's words (Ibison 2008), is false. Economic, political, and legal configurations rather than autonomous agency both galvanized and limited hedge funds to act.

Bringing both crises into the fold accentuates the specific structural factors in Iceland and Cyprus that precipitated the contrasting involvement of hedge fund actors. The divergent structures of the two banking systems were among the most eminent; this extended to both the liability and asset side. Capitalization differences were vast: as discussed, Cyprus had extensive ELA funding, Iceland did not; Cyprus had tens of billions of domestic and foreign deposits, Iceland did not; Cyprus lacked senior debt, while for Iceland, senior debt was its largest liability. The result was that Cypriot banks' fulcrum security rested in their deposits, whereas in Icelandic banks, it initially walked the line between deposits and senior debt, conclusively resting in the latter. Senior debt is a far easier security for hedge funds to invest in—it trades in secondary markets, can be purchased during CDS auctions, and lacks the legal ownership complications of transferring deposit rights. Thus, this structure explains why hedge funds were profoundly invested in Icelandic senior debt and failed to gain widespread traction in Cypriot deposits. It is also no surprise that Landsbanki, the Icelandic bank with the highest proportion of deposits in its liability structure due to Icesave, exhibited the least hedge fund interest and also the lowest ultimate recoveries among all three banks at 14 cents on the dollar (Jónsson & Sigurgeirsson 2017).

The asset side of the balance sheet for the two banking systems furthers understanding of the disparate involvements and results of hedge funds in the two crises. Icelandic bank assets, mainly distinguished UK retail chains as discussed in Section 3.2.4, were vastly higher quality than Cyprus bank holdings of Greek and Cypriot sovereign debt. Cypriot bank ownership of its own nation's sovereign debt in particular was a structure that was irreproducible in Iceland due to minimal sovereign debt. This circular ownership made it economically insurmountable to write-down Cypriot sovereign debt, while enhancing the leverage of the troika in negotiations (i.e. 'if you reject the bail-in, the entire financial system will go under').

Legal structures were also influential. While both Iceland and Cyprus are governed by English bankruptcy law, Cyprus had idiosyncrasies in its foreclosure laws that caused bureaucratic frictions in the wake of the crisis as discussed in Section 4.1.3. The ensuing NPL increase caused downwards pressure on BoC's recapitalized equity, which has since lost a substantial amount of its value. In Iceland, bank claims were the equivalent of recapitalized equity because the claims owned the estates which in turn owned the equity of the new Icelandic banks. However, bank claim values were less correlated with domestic Icelandic mortgage assets due to the presence of valuable foreign assets. Indeed, hedge funds even conceded ownership of these 6bn EUR in króna denominated assets to unlock the value of the foreign ones. Thus, the legal regime governing Icelandic mortgage foreclosures was inconsequential for hedge funds, whereas in Cyprus, it was a key driver of returns and extent of hedge fund involvement in bank equity.

Finally, Cyprus' inclusion in the European Union and common currency were deterrents for certain hedge fund involvements. The Euro effectively prevented the massive carry-trade that occurred in Iceland. Without its own central bank, Cyprus could not create the contrasting fiscal and monetary policy dynamic that propped up high interest-rates and thereby motivated the carry-trade. Inclusion within the EU framework also provided for the material ELA funding received by the Cypriot banks, which disincentivized them from securing senior debt financing as an alternative. European status as the lender-of-last-resort was the driving force behind the bail-in as opposed to a traditional bailout. Unlike in Iceland, where the composition agreement under Icelandic law allowed creditors a say in approving a restructuring plan, the bail-in imposed by the troika in Cyprus gave depositors zero approval capabilities. This is a serious impediment for hedge funds to invest, as they would effectively be subjecting themselves to the unilateral will of a supernational authority.

Positive and negative lens of perceiving hedge funds have the commonality that they eschew antecedent structural features in favor of painting hedge funds in a particular light. A structuralist perspective for hedge funds proves far more satisfactory in grasping the root motivations of their market activities as exemplified by the nuanced Icelandic and Cypriot situations. These structures in Iceland and Cyprus were conceived before any hedge funds arrived on the scene. The resulting timing differential of pre-established structures and present-day hedge fund activities makes individual hedge funds erroneously appear to be the more pertinent unit of analysis given their proximity as a crisis unfolds. However, hedge funds are fluid vehicles— they adapt to fit the contours of their predetermined environment. Thus, myopically zooming in on the activities of specific hedge funds is missing the forest for the trees. Moving forwards, it is important to adopt a structuralist viewpoint if the core motivations of these opaque financial market actors are to be understood effectively in future crises. Hedge fund crisis behavior should be regarded as analogous to pouring water into a basin: it is the structure of the container that determines where the water will flow.

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