**The Advantages of International Investing for Icelandic Investors**

Do returns based on the Icelandic Kroner so we find the expected returns and then adjust it for what the currency is expected to do.

Use older equity and bond forecasts for the expected return for the 2008 period.

**Introduction**

Despite greater integration of international capital markets, investor´s portfolios are largely dominated by domestic investments. This portfolio allocation is a subject of controversy since there have been many studies showing that investing international has multiple advantages, including greater expected returns and diversification benefits.

Investing solely in a relatively small and young country has its advantages and disadvantages. A small market investor may be more comfortable investing in an economy that he is familiar with which could offer him a competitive edge. Investing domestically also has tax benefits, such as lower tax rates on capital gains. On the downside, an investor faces the risk of significant losses if the economy faces downturns since diversification and liquidity is limited in a small economy. Investors that have expenditures that are not only denominated in their country´s currency face significant currency risk due to fluctuations in the exchange rate which can affect their real return.

This paper will investigate how Icelandic investors would benefit from investing into international markets, specifically the US, Euro-Zone, and Japanese markets. We will start by examining the Icelandic economy and how it has evolved during the past two decades. Then we will cover the benefits and drawbacks of investing internationally for an Icelandic investor. We will cover two periods exactly, 2008-2015 and 2016-2023. The reason why we are looking these time periods is to see how Icelandic investor´s portfolio would have changed over time. The earlier period contains the financial crisis of 2008 and Iceland´s economy went through a severe downturn because of it. The later period is post-recession but there were still downturns in the economy during that period, such as the Covid-19 pandemic which struck the world in 2020. The act of diversifying is defined as the process of allocating capital in a way that reduces the exposure to any one particular asset or risk. Diversification is particularly important during economic downturns that only affect specific firms or a specific market. Diversification is a controversial topic in finance. Warren Buffett famously said that “Wide diversification is only required when investors do not understand what they are doing” (breyta gæsalöppum). In reality, most people that invest don´t know what they are doing which is why diversification is so important.

**Iceland´s Economy**

Iceland is a small open economy. Its economy combines a capitalist structure and free-market principles with an extensive welfare system. In recent years, Iceland has achieved high growth, low unemployment, and a remarkably even distribution of income. Tourism and fishing are pillars of the economy. For decades the Icelandic economy relied heavily on the fishing industry, but tourism recently surpassed fishing as Iceland´s main export industry. The country´s GDP was $28 billion in 2022 and tourism accounted for roughly 9% of total GDP. If we compare the country´s GDP into perspective, it´s GDP is not larger than a single US state and is comparable to a medium sized city in the US. Although this comparison may shed light on the small size of the economy it has a noticeably strong economy. Its GDP per capita was $75,000 per capita in 2022 and it was recently measured as having the highest median wealth per capita in the world. It´s population reached 375,000 people in 2023 and has been growing at roughly 1% a year. Despite Iceland´s closest economic partners are European it is not in the European Union.

Despite the modest size of its economy, Iceland has a rich history and has succeeded in establishing a robust financial market. Its financial market is young but has experienced rapid growth in recent years. A stock trading platform (Hlutabréfamarkadurinn hf.) launched in 1985 and Iceland Stock Exchange (ISE) was established but prior to that there was no trading with securities. Trading started with government bonds but soon the first company was listed on ISE and equity trading officially started in 1991.

With such a small economy it only has 31 publicly traded companies. The number of publicly traded companies peaked in 2000 when there were 75 companies on the exchange, but it has decreased since then mainly through mergers and acquisitions (8). The market value of all companies on the exchange is 2,765,074.768 million ISK in February 2024. The value reached an all-time high of 3,664,741.431 million ISK in 2007 and a record low of 156,753.186 million ISK in 2009. Despite its relatively small size and underdevelopment Gunnarsson found that the Icelandic market shares the same signs of inefficiency that appear in larger and developed stock markets (8).

Iceland has two exchanges called Nasdaq Iceland and First North. Nasdaq Iceland has 26 companies and acts as the main exchange. First North is Iceland´s secondary market and includes companies of smaller size. The exchanges have a variety of companies but it´s composition is quite different than some of the major indices in the world.

Nefna þetta chart 1?

The above graph shows us the sectors in the exchanges. Consumer Goods and Services and Financials are the biggest sectors. This sector distribution is different from S&P 500 to give an example, where the biggest sectors are Technology, Financials, and Health Care.

**International versus domestic portfolio allocation**

As mentioned earlier, there have been a lot of studies on international versus domestic portfolio allocation. For example, Solnik (1) finds that international investor´s portfolios benefit from risk reduction when investing in foreign securities and domestic common stock. Meyer and Rose (2) find that international diversification in developing markets is advantageous and forms a means for managing crises. Eun and Resnick (3) find indication that potential gains can be made from international diversification. Li, Sarker, and Wang (4) show that the benefits of international diversification, even without short selling, are substantial for US equity investors.

If we look at more recent studies, we find the same result. Eun, Lai, Roon, and Zhang (5) document that factor fund diversification strategies yield substantial improvements in portfolio efficiency beyond what can be achieved by diversifying through a traditional country market index. Driessen and Laeven (6) also find that the benefit from international investments remain substantial and the reward from international portfolio diversification are larger for countries with higher country risk. Abid, Leung, Mroua, and Wong (7) find that risk averse and risk seeking investors would prefer an international portfolio over a domestic portfolio if both portfolios have the same level of risk.

Investor psychology plays a significant role in investing and their portfolio allocation. French and Poterba (9) find that most investors hold nearly all their wealth in domestic assets. Kilka and Weber (10) show that equity portfolio holdings reveal a strong bias towards domestic stocks and conclude that this bias is explained by the stock return expectation expressed in probability judgements. Oehler, Rummer, and Wendt find a similar result that indicates that one of the phenomena in portfolio allocation is the home-bias effect, since investors holdings are of a higher-than-optimal portion of domestic assets.

Although these studies were not made from the perspective of an Icelandic investor, we can assume that the result and investor´s behavior is quite similar across different countries. Anderson, Fedenia, Hirschey, and Skiba (12) find that home-bias exists across a broad sample of portfolios in more than 60 countries. Their study also finds that institutional investors from countries with higher levels of masculinity and long-term orientation display less home bias in their investment portfolios. According to Geert Hofstede´s cultural dimensions theory Iceland is a country that shows high levels of femininity because of its work-life balance, equality, and social welfare. Despite there being limited studies on Icelandic investors portfolio allocation, we can assume that they experience more home-bias relative to other countries and thus should allocate more of their investments domestically.

**Methodology**

**Data**

This study uses monthly price data of one bond and one equity index from each area from April 2004 to December 2023. The American equity and bond index used are S&P500 (SPX) and Bloomberg US Agg total return value (LBUSTRUU). The European equity and bond index used are STOXX Europe 600 and Bloomberg Pan-European Aggregate Total Return Index (LP06TREU). The Icelandic equity index and bond fund are OMXIGI and KAUPGBL. The reason we do not use a bond index for Iceland is because there is none, so we chose the largest government bond fund in Iceland. The index and fund return was calculated using data from Bloomberg.

To measure a portfolios risk-adjusted relative returns we calculated the Sharpe ratio for various portfolios. We obtained the monthly risk-free rate from the Wharton Research Data Services database. The risk-free rate was found in the Fama-French 3 factors plus momentum monthly frequency. The risk-free rate was collected from April 2004 to December 2023. The risk-free rate used for this study was the US one month treasury bill rate. The treasury bill is widely perceived as the safest investment in the world and thus we thought it would be appropriate to use that for our risk-free rate.

After calculating the efficient frontier, we calculated the realized return over the time periods for various portfolios. Since we were calculating realized return of an international portfolio, we needed exchange rates. We obtained the exchange rates for Euros and the Dollar from the Central Bank of Iceland´s (Seðlabankinn) database. The exchange rates were collected from April 2004 to December 2023.

All the data from the Icelandic market was obtained from the Nasdaq Nordic database. Nasdaq Nordic operates the Icelandic exchange and various data on individual Icelandic equities and bonds that were used for this study.

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**Þegar ég er að byggja portfolion, skoða hvernig þau væru fyrir risk averse á móti áhættusækins fjárfesti.**

**Liquidity Concerns:** The Icelandic stock market is smaller and less liquid than larger global markets. This can make it challenging to enter or exit positions without affecting market prices, particularly for larger investments.

**The Icelandic Kroner**

Despite its small size, Iceland has its own currency called the Icelandic Krona.

[Volatility\_Icelandic kroan.pdf (ad.local)](file:///\\center1.ad.local\dfs$\IS\RVK\Desktop02\sigurdurbl\Desktop\Volatility_Icelandic%20kroan.pdf) – 2001 to 2008

The Icelandic Krona is said to be more volatile than other currencies. In 2006-2008, the volatility of the Krona has been elevated in the wake of country-specific and global schocks amid large macroeconomic imbalances.

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