COMMENT LETTER

August 10, 2017

ICI Global Letter on Central Bank of Ireland's ETF Discussion Paper (pdf)

10 August 2017 Central Bank of Ireland PO Box No. 559 New Wapping Street North Wall Quay Dublin 1 Ireland Re: Discussion Paper on Exchange-Traded Funds Dear Sir or Madam: ICI Global1 welcomes the opportunity to comment on the Central Bank of Ireland's discussion paper on exchange-traded funds. 2 As one of the most successful financial innovations in recent years, ETFs are an important part of both the US and the global fund markets. Many of our members— investment companies that are registered under the Investment Company Act of 1940 and other regulated funds in jurisdictions around the world3—sponsor ETFs both in the United States and in the European Union.4 We therefore appreciate the CBI's attention to ETFs and particularly appreciate its decision to structure the paper as an information gathering exercise that will position the CBI as a leading voice in shaping the future global regulation of ETFs. 1 ICI Global carries out the international work of the Investment Company Institute, the leading association representing regulated funds globally. ICI's membership includes regulated funds publicly offered to investors in jurisdictions worldwide, with total assets of US\$26.0 trillion. ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of regulated investment funds, their managers, and investors. ICI Global has offices in London, Hong Kong, and Washington, DC. 2 Central Bank of Ireland, Exchange Traded Funds, Discussion Paper (2017), available at

https://www.centralbank.ie/docs/default-source/publications/discussion-papers/discussion-p aper-6/discussion-paper-6--- exchange-traded-funds.pdf?sfvrsn=6. 3 For purposes of this letter, regulated funds includes any collective investment vehicle that (1) primarily invests in securities, (2) is substantively regulated, and (3) is eligible for public sale. Generally, such funds are regulated to make them eligible for sale to the retail public, even if a particular fund may elect to limit its offering to institutional investors. Such funds typically are subject to substantive regulation in areas such as disclosure, form of organization, custody, minimum capital, valuation, investment restrictions (e.g., leverage, types of investments or "eligible assets," concentration limits and/or diversification standards). 4 Collectively, ICI members have \$2.8 trillion in total net assets under management in US ETFs and ETFs authorised under the Undertakings for Collective Investment in Transferable Securities (UCITS) Directive. Central Bank of Ireland Page 2 of 11 We firmly believe that authorities and market participants must improve their understanding of the potential risks inherent in financial products and the ways in which such risks can be mitigated. As such, we agree with the CBI's observation that as the "locus of innovation," ETFs require "close regulatory attention to ensure that the benefits of innovation are delivered within a robust, but enabling, regulatory framework." We also appreciate the CBI's efforts to gather more information on ETFs in Europe. The CBI has posed many thoughtful questions regarding ETF dealing and ETF secondary market trading, liquidity, and potential impacts on underlying securities held by ETFs. We agree that more European-level analysis of ETFs would serve to support the CBI's supervisory and authorisation responsibilities as well as help other national and international policymakers seek to better understand ETFs. Unfortunately, the data necessary to undertake substantive empirical analysis for most of these questions are not currently available for European ETFs. As data on European ETFs becomes more readily available to researchers, we intend to pursue a research agenda focusing on several of these issues. Indeed, ETFs have become a popular investment option for European investors. As the principal domicile for European ETFs, the number and net assets of Irishdomiciled ETFs have grown rapidly over the past decade. As of June 2017, there were 673 Irish-domiciled ETFs with €327 billion in net assets under management, up from 83 ETFs with €22 billion in net assets as of year-end 2007 (Figure 1). Figure 1 Irish-Domiciled ETFs Net Assets Have Grown Rapidly Over Past Decade Billions of euros; year-end, 2007-2017* *Data are as of June 30, 2017. Note: Data exclude ETFs that invest primarily in other ETFs. Components may not add to the total because of rounding. Source: Investment Company Institute tabulations of Morningstar Direct data 22 24 43 61 68 96 126 185 230 287 320 0 0 < 0.5 1 2 3 1 2 2 6 7 22 24 43 62 70 99 128 187 233 293 327 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017* UCITS AIFs 296 613519464425367 673674 Number of ETFs 83 107 214 Central Bank of Ireland Page 3 of 11 Much of this growth in net assets is due to inflows stemming from investor demand for ETFs. From January 2007 through June 2017, estimated net share issuance of Irish-domiciled UCITS ETFs totaled €228 billion (Figure 2). Figure 2 Cumulative Estimated Net Cash Flow of Irish-Domiciled UCITS ETFs Billions of euros; monthly, 2007-2017* *Data are through June 30, 2017. Note: Data exclude ETFs that invest primarily in other ETFs. Source: Investment Company Institute tabulations of Morningstar Direct data With this growth in mind, the paper is centered around three overarching themes: investor expectations, liquidity, and the increasing popularity of ETFs. Our comments generally will focus on these three themes. Investor Expectations The discussion paper begins by noting the growth of ETFs among a broad investor base and questioning whether retail investor expectations are realistic in all market conditions. We believe that it is of paramount importance that investors understand the product in which they have invested or are considering investing. In addition, for ETF investors that seek professional investment advice from a financial intermediary, it is critical that intermediaries understand the investment products they sell and have a robust process to assess the profile of a customer to make appropriate recommendations. For example, it is important to understand the ETF's investment strategy (index-based or actively managed strategy) and how the ETF implements its strategy (physical or synthetic). As shown in Figures 3 and 4, the vast majority of Irish-domiciled UCITS ETFs are indexed-based products that 0 50 100 150 200 250 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 Central Bank of Ireland Page 4 of 11 track their target index by physically holding all, or a representative sample, of the underlying securities that make up that index (i.e., physical replication). Figure 3 Irish-Domiciled UCITS ETFs Are Mainly Indexed-Based and Equity Focused Percentage of net assets, June 30, 2017 Note: Data exclude ETFs that invest primarily in other ETFs. *Other category consists of allocation, alternative, commodities, convertibles, and money market. Source: Investment Company Institute tabulations of Morningstar Direct data Figure 4 Vast majority of Irish-Domiciled UCITS ETFs Are Physically Replicated Percentage of net assets; year-end, 2007-2017* *Data are as of June 30, 2017. Note: Data exclude ETFs that invest primarily in other ETFs. Data may not add to 100 percent because of rounding. Source: Investment Company Institute tabulations of Morningstar Direct data 2% 98% Actively managed Index 66% 33% 1% Equity Fixed income Other* 99 100 95 93 90 90 92 92 92 92 5 7 10 9 8 6 6 6 71 1 2 2 2 2 2 0% 20% 40% 60% 80% 100% 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

2017* Physical Synthetic Not reported Net Assets: (€ billions) 22 4324 61 3202872301851269668 Total net assets: €320 billion Central Bank of Ireland Page 5 of 11 In terms of product structure, ETFs and mutual funds5 share many characteristics. Both are investment vehicles that offer investors a proportionate share in a pool of stocks, bonds or other assets; access to a particular market or investment strategy (using an index-based or actively managed strategy); are primarily regulated by the same laws;6 and issue new shares and redeem existing shares to meet investor demand. 7 Despite these similarities, however, there are key differences that relate to the way investors transact in fund shares. Mutual fund investors buy and sell fund shares directly from the fund (or sometimes through a financial advisor or other intermediary) at a NAV that is calculated by the fund once a day. In contrast, ETF investors typically buy and sell ETF shares from each other (through a broker) throughout the day on an exchange or over-the-counter at a marketdetermined price. Indeed, the secondary market trading of ETFs can serve as an additional source of intraday liquidity for market participants. Understanding how shares of a fund may be purchased or sold is fundamental to understanding an investment in the fund. In fact, ETFs regulated in both the United States and the European Union must include information in their prospectuses and marketing materials about, among other things, the nature and potential risks of secondary market trading.8 Many ETF issuers also actively seek to educate investors, through educational materials on their websites, outreach to financial advisors, and other efforts, about ETFs and how they are different from other investment products. As the leading association representing regulated funds globally, one of ICI's core missions is to promote public understanding of mutual funds and other investment companies through extensive data collection and detailed analyses. To this end, as the size and scope of the ETF industry has grown and the use of ETFs has become more widespread across both institutional 5 For purposes of this letter, we use the term "mutual fund" to refer to both non-ETF open-end investment companies registered under the Investment Company Act of 1940 and non-ETF open-end collective investment schemes authorised under the UCITS Directive. 6 As of May 2017, the vast majority of US ETFs (98 percent of \$2.9 trillion in US ETF total net assets) are organised and regulated as registered investment companies under the Investment Company Act of 1940, the same legislation that governs US mutual funds (Source: Investment Company Institute). Similarly, as of March 2017, the majority of EU-domiciled ETF structures (98 percent of €556 billion in EUdomiciled ETF total net assets) are authorised under the UCITS Directive, the same regulatory regime that governs the UCITS mutual funds domiciled within the European Union (Source: ICI calculations based on data reported in "Trends in the European Investment Fund Industry in the First Quarter of 2017," European Fund and Asset Management Association, June 2017, No. 69

http://www.efama.org/Publications/Statistics/Quarterly/Quarterly%20Statistical%20Reports/170609_Quarterly%20Stati stical%20Release%20Q1%202017.pdf). 7 Only certain large institutional investors called "authorised participants" (APs) transact with the ETF directly at net asset value (NAV) in a process known as the creation and redemption mechanism. This process allows the number of ETF shares outstanding to expand or contract based on demand. 8 See e.g., Form N-1A, the disclosure applicable to open-end ETFs registered under the US Investment Company Act of 1940 and ESMA Guidelines for competent authorities and UCITS management companies: Guidelines on ETFs and other UCITS issues, available at

https://www.esma.europa.eu/sites/default/files/library/2015/11/esma-2014-0011-01-00_en_0.pdf. Central Bank of Ireland Page 6 of 11 and retail investors globally, we have stepped up our research efforts in this area, covering topics from understanding how ETFs are structured to how they behave under stressed market conditions.9 For example, our most recent publication provides an overview of the listing and trading requirements for US

ETFs—a process that is often complicated, time-consuming, and misunderstood.10 Liquidity The discussion paper notes that closely related to the question of investor expectations and the changing profile of investors is ETF liquidity. The paper correctly acknowledges that secondary market trading in ETFs does not necessarily require an ETF to access its underlying asset market and quite often, the liquidity of an ETF can be greater than its underlying assets. As shown in Figure 5, estimated secondary market trading volume of European ETFs has increased over the past several years— averaging €102 billion per month in the 12-month period ending June 2017, up from €59 billion per month in the 12month period ending June 2014. In addition, the paper discusses the trading activity of APs and other official liquidity providers (OLPs) and the important role they play in ETF liquidity. Orderly trading in an ETF requires a smoothly functioning market for the ETF's holdings so that APs and OLPs can reliably value the ETF's portfolio. If the underlying market becomes disorderly—like it did on August 24, 2015 in the United States—the arbitrage mechanism can be disrupted and an ETF can trade at prices substantially away from its implied value. As such, we believe the most appropriate regulatory approach to ensuring adequate market liquidity is through initiatives designed to improve overall market structure and limit market disruptions. We have strongly supported initiatives in the United States and Europe to address inefficiencies in the current structure of the financial markets generally and to ensure that regulatory changes strengthen operational integrity and market stability.11 9 See Appendix A. 10 Similar to EU ETFs that are subject to the requirements of UCITS, the Markets in Financial Instruments Directive, and exchange rules, US ETFs are subject to various SEC and national exchange rules. This paper describes the background of ETFs, the history of their regulation under the US Securities Exchange Act of 1934, current listing rules and processes, and the requirements for SEC relief under the Securities Exchange Act. See Understanding the Regulation of Exchange-Traded Funds Under the Securities Exchange Act of 1934, August 2017, available at https://www.ici.org/pdf/ppr 17 etf listing standards.pdf. For additional ETF-related reading material, see Appendix A. 11 See e.g., Letter from Dan Waters, Managing Director, ICI Global, to IOSCO, dated February 21, 2017, available at https://www.ici.org/pdf/30588a.pdf (explaining that comprehensive disclosures about the order handling practices of brokers reduces information asymmetries and enhances market efficiencies); Letter David W. Blass, General Counsel, ICI, to Brent J. Fields, Secretary, SEC, dated December 22, 2016, available at https://www.ici.org/pdf/30494a.pdf (urging the SEC to approve amendments to the national market system to address extraordinary market volatility); Letter from David W. Blass, General Counsel, ICI, to Office of the Under Secretary for Domestic Finance, Department of the Treasury, dated April 8, 2016, available at https://www.ici.org/pdf/29819.pdf (recommending steps that would improve efficiency without undermining liquidity in the US Treasury market); Letter from David W. Blass, General Counsel, ICI, to Brent J. Fields, Secretary, SEC, dated September 26, 2016, available at https://www.ici.org/pdf/16 ici sec order routing ltr.pdf (urging the SEC to adopt rules to correct information inefficiencies in the US equity market); Letter from David W. Blass, General Counsel, ICI, to SEC Equity Market Structure Advisory Committee, dated January 20, 2016, available at https://www.ici.org/pdf/29652.pdf (recommending parameters for a pilot program that would study maker-taker pricing Central Bank of Ireland Page 7 of 11 Figure 5 Estimated Secondary Market Trading Volume* of European ETFs Billions of euros, monthly, April 2013-June 2017 *includes exchange and OTC trades Source: ICI calculations based on data reported in ETFGI European ETF and ETP Industry Insights published monthly by ETFGI Most investors, particularly retail investors, access ETFs through trading on the secondary market and generally are not motivated by arbitrage (i.e., the desire to exploit differences between the market price of the ETF and its NAV). These investors do not interact with the ETF directly and do not create transactions in the underlying securities

because only the ETF shares are trading hands. On the other hand, an ETF's creations and redemptions (primary market activity) directly involve transactions in the ETF's underlying securities. Preliminary analysis suggests that primary market activity12 of Irish-domiciled ETFs represents a relatively small share of European ETF activity.13 As shown in Figure 6, estimated monthly net new cash flow of Irish-domiciled ETFs accounted for at most 10.5 percent of estimated monthly European ETF activity during the period April 2013 through June 2017. Indeed, half of the monthly observations were less than 3.4 percent, meaning that the vast majority of ETF activity occurred in the secondary market where trades were accomplished without any without diminishing liquidity); See also Letter from Karrie McMillan, General Counsel, ICI, to Steven Maijoor, Chair, ESMA, dated March 30, 2012, at 4 and footnote 12, available at https://www.ici.org/pdf/26012.pdf (citing various ICI recommendations focused on the implementation of effective systems and controls to reduce the risks to the markets or trading that could negatively impact market liquidity). 12 Ideally, primary market activity would be calculated as the sum of gross creations and gross redemptions. Because those data are not available for Irish-domiciled UCITS ETFs, we used estimated net new cash flow as a proxy. 13 For these purposes, European ETF activity is the sum of secondary market volume and primary market activity of Irish-domiciled UCITS ETFs. 0 20 40 60 80 100 120 140 160 180 Apr 13 Sep 13 Feb 14 Jul 14 Dec 14 May 15 Oct 15 Mar 16 Aug 16 Jan 17 Jun 17 Central Bank of Ireland Page 8 of 11 intermediation by APs and investors transferred exposure and risk by exchanging ETF shares rather than engaging in transactions in the underlying securities. Figure 6 Irish-Domiciled UCITS ETFs' Primary Market Activity1 Account for a Small Share2 of European ETF Activity Percent; monthly, April 2013-June 2017 1 Primary market activity is proxied by the absolute value of monthly estimated net new cash flow from Figure 2. 2 Primary market activity relative to the sum of estimated European ETF secondary market trading volume (from Figure 5) and primary market activity. Note: Estimated net new cash flow data exclude ETFs that invest primarily in other ETFs. Sources: Investment Company Institute calculations. Increasing Popularity of ETFs Specific features of ETFs that investors find attractive (e.g., intraday tradability) as well as general trends in investing and money management (e.g., rising popularity of index-based investments and a greater use of asset allocation models that favor ETFs) have helped to spur their growth. This increased investor demand for ETFs has led to a rapid increase in the number of Irish-domiciled UCITS ETFs, with 691 new ETFs offered to investors in the past decade (Figure 7). Until 2012, only 13 Irish-domiciled ETFs had been liquidated when market pressures appeared to come into play and sponsors began liquidating ETFs that had failed to gather sufficient assets. Since then, ETF liquidations globally have become a more common occurrence—a natural result of a maturing industry. Indeed, ETFs exit the business each year and do not occasion disorder broadly affecting the investing public, market participants, or financial markets. Like other types of regulated funds, when an ETF is liquidated or merged, investors receive the market value of the underlying securities less any accrued fees and expenses. For example, if the liquidating ETF is an index-based ETF that tracks the S&P 500, investors will receive their share of the market value of the ETF's S&P 500 securities. There 0 3 6 9 12 15 Apr 13 Sep 13 Feb 14 Jul 14 Dec 14 May 15 Oct 15 Mar 16 Aug 16 Jan 17 Jun 17 Maximum=10.5% (July 2016) Median=3.4% Minimum=0.0% (2016-January) Central Bank of Ireland Page 9 of 11 is an established and orderly process by which the fund liquidates its assets, distributes the proceeds pro rata to investors and winds up its affairs, all without consequence to the financial system at large.14 Figure 7 Number of Irish-Domiciled ETF UCITS Entering and Exiting the Industry 2007-2017* *Data are through June 30, 2017. Note: Data exclude ETFs that invest primarily in other ETFs. Source: Investment Company Institute tabulations of Morningstar Direct data The discussion paper asks whether given the increasing popularity of ETFs, the regulatory framework, which does not specifically contemplate ETFs,

sufficiently addresses their "hybrid structure." Although sometimes portrayed as unique instruments, as noted above, ETFs are substantially similar to mutual funds, from both a regulatory and a structural standpoint. That being said, as the ETF product landscape continues to evolve, policymakers and regulators should consider if, or how, regulatory regimes could better accommodate ETFs while also allowing product innovations or other changes that lower distribution barriers. In doing so, it remains important for regulators to continue to be mindful of initiatives that, even inadvertently, might harm ETFs and their investors.15 * * * * 14 For a general discussion of fund liquidations under UCITS, see Letter from Paul Schott Stevens, President & CEO, ICI, to Secretariat of the Financial Stability Board, dated April 7, 2014, available at https://www.ici.org/pdf/14 ici fsb gsifi ltr.pdf. 15 A financial transaction tax, despite being characterized as a tax on those responsible for the financial crisis, would fall directly on investors in ETFs and other funds. 31 23 89 82 68 66 57 72 99 80 24 0 0 9 0 4 20 25 22 19 23 25 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017* Opened Liquidated/merged Central Bank of Ireland Page 10 of 11 We appreciate the opportunity to provide comments on the paper. If you have any questions about our comments or would like additional information, please contact me at +44 207 961 0831 or dan.waters@ici.org; Jane Heinrichs at +1-202-371-5410 or jheinrichs@ici.org; or Shelly Antoniewicz at +1-202-326-5910 or shelly@ici.org. Yours faithfully, /s/ Dan Waters Managing Director—ICI Global Central Bank of Ireland Page 11 of 11 Appendix A ICI Research Papers on ETFs • Understanding the Regulation of Exchange-Traded Funds Under the Securities Exchange Act of 1934, August 2017 • The Role and Activities of Authorized Participants of Exchange-Traded Funds, March 2015 • Understanding Exchange-Traded Funds: How ETFs Work, September 2014 ICI Viewpoints on ETFs • Average Expense Ratios for Index ETFs Have Declined, May 24, 2017 • Mutual Funds and ETFs' Share of the Corporate Bond Market: What's the Right Answer?, January 19, 2017 • ETFs Boost Liquidity in Times of Financial Stress, August 7, 2016 • The Liquidity Provided by ETFs Is No Mirage, June 20, 2016 • High-Yield Bond ETFs: A Source of Liquidity, December 22, 2015 • Traders, Start Your Engines: After August 24, Exchanges Need to Coordinate, November 30, 2015 • US Bond ETFs Resilient on August 24, November 20, 2015 • More Unfounded Speculation on Bond ETFs and Financial Stability, April 13, 2015 • Does Liquidity in ETFs Depend Solely on Authorized Participants?, March 16, 2015 • Plenty of Players Provide Liquidity for ETFs, December 2, 2014 • A Look Inside ETFs and ETF Trading, September 23, 2014 • Sizing Up Mutual Fund and ETF Investment in Emerging Markets, August 18, 2014 • ETFs Don't Move the Market—Information Does, March 11, 2014 • Key Data Undercut Critics' Arguments on ETFs and Intraday Volatility, April 14, 2012 • The (Dis)Connection Between ETFs and Market Volatility, February 23, 2012 • ETF Basics: The Creation and Redemption Process and Why It Matters, January 19, 2012 Other Resources Exchange-Traded Funds Resource Center

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