Box 7

EXCHANGE-TRADED FUNDS

Exchange-traded funds (ETFs) are (mostly) passive index-tracking investment products granting investors cost-effective and liquid exposure to a wide range of asset classes and geographical areas. These products have experienced impressive growth since 2000, and they weathered the crisis relatively unscathed (see Chart A). The growth of these products, the pace of the related financial innovation and (linked to the latter) their increasing degree of complexity have attracted supervisory bodies' attention at the international level. This box summarises the key characteristics of ETFs, describes the evolution of ETFs in terms of the number of funds and assets under management (AuM) (also providing where possible relevant euro area or EU data) and finally sketches in broad terms the issues that may require closer scrutiny in the near future by the international financial stability, supervisory and regulatory communities.

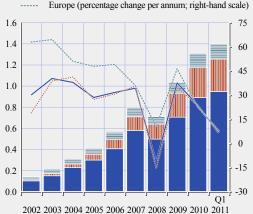
ETFs come broadly in two forms: physical (or plain vanilla) and synthetic (or swap-based) ETFs. Physical instruments track an underlying index by physically holding an approximation of this index's portfolio composition. It is the prevalent ETF form worldwide in general and in the United States, the largest market for ETFs in terms of AuM, in particular. Synthetic ETFs replicate the underlying index by using derivatives rather than holding an approximation of the underlying portfolio. This form is predominant and common in the European and, more specifically, the EU segment of the ETF market. The development of the EU segment is closely linked to the implementation of the UCITS III Directive in the EU in 2002 (see Chart B).

Whereas physical ETFs hold underlying securities in a ring-fenced separate account exposing the investor to no counterparty risk of the issuer, synthetic ETFs hold in addition to a basket of securities (which may be different from the underlying index securities) an index swap, thereby

Chart A ETF assets under management and assets under management growth rates by geographical area



- United States (USD trillions: left-hand scale) Europe (USD trillions: left-hand scale)
 - other (USD trillions; left-hand scale)
- global (percentage change per annum; right-hand scale) United States (percentage change per annum; right-hand scale)



Source: BlackRock

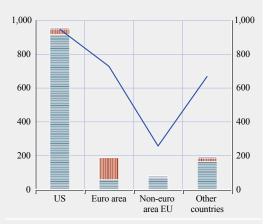
Note: Europe encompasses the EU, Switzerland, Norway, Russia and Turkey

Chart B ETF assets under management by type and total number for differ<u>e</u>nt geographical regions

(Q1 2011; USD billions and number of funds)

hvbrid synthetic physical

number of ETFs



Source: BlackRock

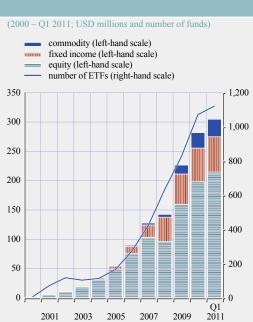
exposing investors to swap counterparty risk. In the EU, this risk is limited to a maximum of 10% of the value of the fund under the UCITS III Directive. This difference in structure grants physical ETFs benefits in terms of transparency as investors in physical ETFs in case of failure of the ETF issuer know which actual collateral is backing their investment.

Asset management companies and big banks are the main providers of ETFs, with a high concentration of market shares among a few main providers. While the EU has broadly drawn level with the United States in terms of the number of ETFs and has outpaced the United States and other countries in terms of AuM growth rates since 2002, the US ETFs have considerably more AuM than those in other geographical areas. The share of European commodity ETFs in global commodity ETFs reached 59% of AuM and constituted the fastest-growing segment of European ETFs (see Chart C).

With USD 1.3 trillion of AuM at the end of 2010¹ the global ETF industry is smaller than the global hedge fund (USD 2-2.5 trillion)² and the global mutual fund (USD 18.2 trillion)³ industries. There are, however, ETF-related developments that have drawn the attention of financial authorities. They relate to two different types of factors, each potentially leading to financial stability vulnerabilities.4

- 1 Source: BlackRock
- 2 Based on end-December 2010 estimates by Hedge Fund Research and HedgeFund.net.
- 3 The estimate includes equity, bond and balanced/mixed funds, but excludes money market, other (including funds of funds) and unclassified funds. See European Fund and Asset Management Association, "International Statistical Release", Q4 2010.
- See Annex 1.7. entitled "Exchange-Traded Funds: Mechanics and Risks" in IMF, Global Financial Stability Report, April 2011; Financial Stability Board, "Potential financial stability issues arising from recent trends in Exchange-Traded Funds (ETFs)", 12 April 2011; as well as S. Ramaswamy, "Market structures and systemic risks of exchange-traded funds", BIS Working Paper Series, No 343, April 2011

Chart C European ETFs by underlying asset class



Source: BlackRock. Note: European ETFs include those in the EU countries, Switzerland, Norway, Russia and Turkey. On the one hand, structural elements linked to specific types or segments of the ETF investment class are currently under closer analysis by financial authorities. In particular, the following aspects of ETFs are generally mentioned as potentially leading to financial stability concerns in this context:⁵

- (i) An increase in complexity and opacity of synthetic ETFs in particular, potentially undermining risk monitoring.
- (ii) Risks linked to the composition and quality of the collateral pool underlying ETF structures.
- (iii) Risks linked to the replication of the underlying indices.
- (iv) Market liquidity risks linked to the available redemption options for ETF shares in both physical and synthetic structures.

On the other hand, the growth in ETF assets under management has added to already considerable investment flows into emerging market economies and commodities. These developments are being monitored closely as they might further fuel asset price bubbles or volatility, increasing the risk of a disorderly unwinding of these investment flows.

⁵ It is worthwhile mentioning that the risks and transparency issues raised are not ETF-specific and might also be relevant for certain types of mutual funds or the underlying building blocks (i.e. swaps, securities lending) more generally.