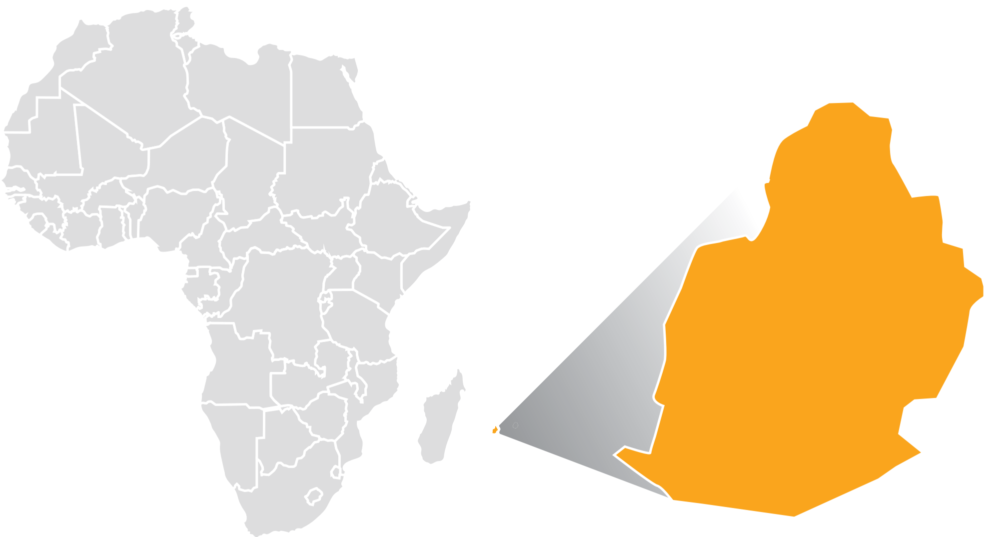
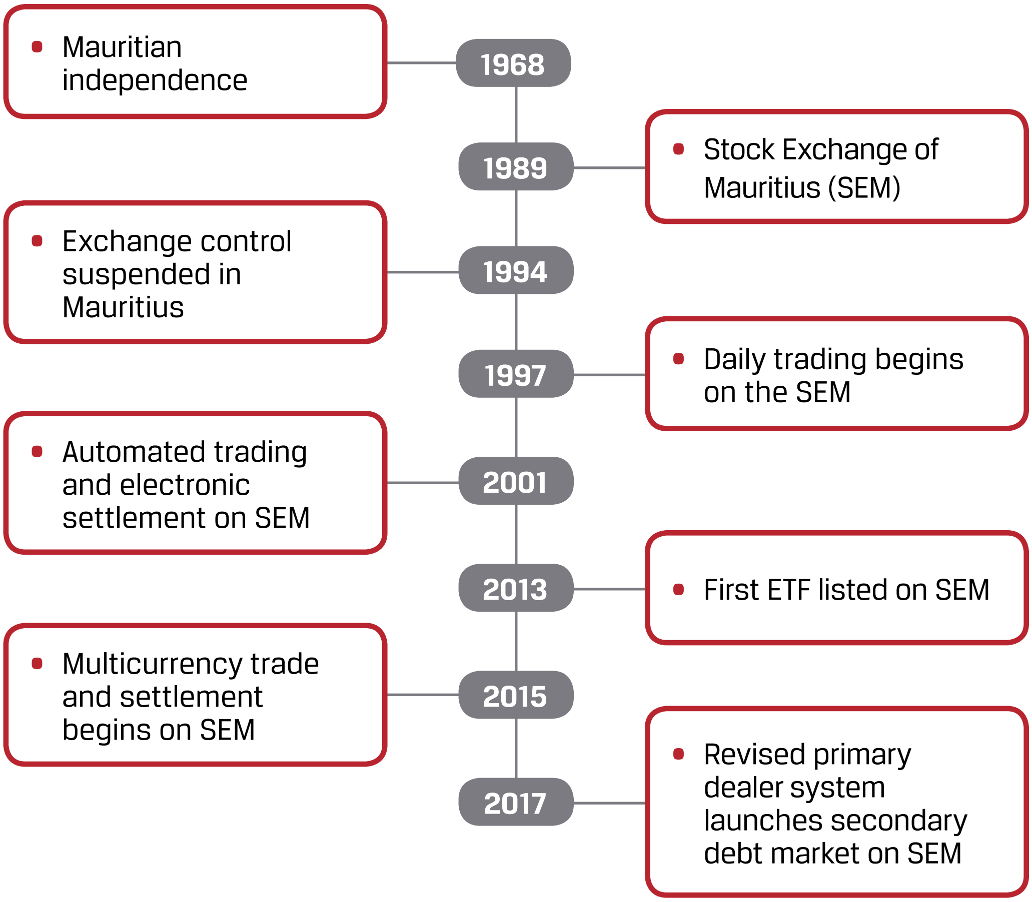
MAURITIUS



$20.64 Bn	$15.55 Bn	63	16	23.44%	23.48%	17.68%
Equity Market Capitalization	Debt Market Capitalization	Number of listed companies	Number of issuers (bonds)	Domestic Equity Market Cap/GDP	Total Equity Market Cap/ GDP	Domestic Debt Market Cap/GDP

6,335,817,398	562,716,006,443
Equity Market Share Volume Traded	Debt Market Instrument Volume Traded



Mauritian independence
1968
1989
Stock Exchange of Mauritius (SEM)
Exchange control suspended in Mauritius
1994
1997
Daily trading begins on the SEM
Automated trading and electronic settlement on SEM
2001
2013
First ETF listed on SEM
Multicurrency trade and settlement begins on SEM
2015
2017
Revised primary dealer system launches secondary debt market on SEM

MAURITIUS

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Trading commenced on the Stock Exchange of Mauritius (SEM)[10] on 5 July 1989 with five listed companies for a combined market capitalisation of USD70 million. At first, trading occurred through a closed-box method,[11] then through an open-outcry system, in which trading lasted five minutes with a settlement cycle of more than a fortnight. Trading was extended to two days a week in 1992 and to three in 1994. The Exchange Control Act of 1951 was suspended in 1994, which meant that foreign investors could freely participate on the SEM for the first time. In 1997, trading became a daily affair, and the Central Depository & Settlement Co Ltd (CDS) was created. In 2001, trading on the SEM became both automated and electronic through the SEM Automatic Trading System (SEMATS).

Although trading on the SEM main board, known as the Official List (OFF), had been automated, an OTC board remained. It was not offered a similar path to automation until 2006, when the creation of the Development & Enterprise Market (DEM)[12] offered a proper listing status on this secondary board. In 2012, the SEM enabled multicurrency[13] listings, trading, and settlement on its platform and onboarded the first stock that could be traded in US dollars, opening the gates for similar listings of Global Business License (GBL) holders.[14] In 2013, the SEM welcomed its first exchange-traded fund (ETF), and by 2015, it would be possible to trade and settle a given security in multiple currencies.[15] The SEM continues to pursue an internationalisation strategy. Most recently, it introduced a "fast-track" process for the listing of entities that are already listed on a major exchange. The SEM is a member of the World Federation of Exchanges and recognised by Her Majesty's Revenue & Customs in the United Kingdom, and it won the Africa investor (Ai) "Most Innovative African Stock Exchange" award in 2017.

Figure 1 charts the evolution of the SEM's main equity index, the SEMDEX. Measured at constant currency (i.e., adjusted for inflation), the average daily market turnover during the early years stood at MUR7 million (<USD0.5 million) per day and rose to MUR63 million (~USD2 million) starting in 2007. Similarly, foreign investor participation, which averaged 22% over

[10]See www.stockexchangeofmauritius.com/about-us/sem-at-a-glance.

[11]Brokers would place client orders into a box dedicated for a company, and then the SEM would conduct the matching upon opening the boxes.

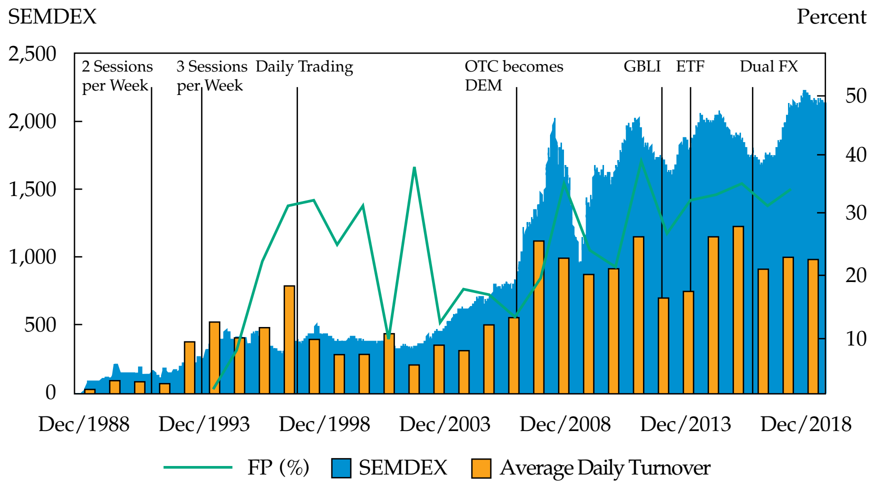
[12]The DEM offers a secondary listing status. The key differences between OFF and DEM are free-float limits, a minimum number of shareholders, and a track record requirement for entities aiming to go public.

[13]It is possible to trade and settle securities denominated in MUR, USD, EUR, GBP, and ZAR on the SEM.

[14]Typically, a company set up in Mauritius by non-Mauritians for the purpose of conducting business outside of Mauritius. Such entities are allowed to be domiciled in Mauritius and are regulated by the financial services regulator—the Financial Services Commission (FSC)—operating with a GBL.

[15]There is only one such security to date.

FIGURE 1. TRADE EVOLUTION AND KEY MILESTONES



a similar period, accelerated to 31% starting in 2008. There is a visible shift in both domestic and foreign trading after 2007, which coincides with the creation and formalisation of the secondary market, the DEM. Thus, circa 2007 marks the beginning of the current modern trading era on the SEM.

The Mauritian bourse has evolved from a market capitalisation of ~USD70 million, representing 3% of GDP and five stocks, to a total market cap of MUR429 billion (USD12.4 billion), representing 89% of GDP and just under 100 listed companies, at the end of 2018. If we exclude the shares of dual- or multiple-listed companies whose shares are not on the local register and thus cannot be traded,[16] the SEM's market cap stands at MUR362 billion (~USD10.5 billion)—that is, 75% of GDP. Of the ~100 equities listed at the end of 2018, roughly one in five (20%) are GBLs, meaning that they are foreign owned, typically trade in a foreign currency, and tend to be dual- or even multiple-listed. There is one depositary receipt (DR) representing the Class D shares of the supra-national African Export–Import Bank (Afreximbank). There are also four ETFs: equity, gold, and two sovereign debt trackers. The SEM is host to a plethora of technical listings—that is, funds that are listed for transparency purposes but on which no trading is expected to take place on the secondary market. Given the absence of derivatives (e.g., futures and options) and the inability to sell short, the SEM remains a market where investors tend to adopt a buy-and-hold approach. Although fees were cut by 88%, to 15 bps, to help stimulate short-term trading, the opportunities to conduct such short-term turnaround trades have been limited because of limited price volatility.

In terms of market capitalisation, the split between domestic listings and newer GBLs is 72% to 28%; however, the split of trading (i.e., total value traded) during the last five years is closer to 92% to 7%, with the remaining 1%

[16]Given that settlement in Mauritius can only be done through the CDS and not through third parties, shares need to be manually/physically transferred (deposited or withdrawn) across share registers into or out of the CDS. This process requires several business days, thus restricting the ability for arbitrage.

driven by ETFs. This split in value traded more closely reflects the 88%–12% split in terms of market cap between domestic companies and GBLs when excluding the shares not available for trading on the SEM.

The constitution of the domestic market reflects the way Mauritius diversified its economy during the past half-century. Mauritius became an independent island state in 1968. A sugarcane-based monocrop economy at the time, Mauritius went on to develop an inward-focused manufacturing industry in the 1960s and a textiles-heavy and export-focused manufacturing industry during the 1980s. It then diversified into the tertiary sector in the early 1990s, with a particular focus on financial services through the creation of "cross-border investment and finance" under a "well-regulated and transparent platform," according to the Economic Development Board Mauritius.[17]

Today's conglomerates and investment holding companies are legacies of the sugar estates that spun their non-sugar-related businesses off into separate investment holding companies post-independence. A hundred and fifty years ago, the number of sugar mills in Mauritius peaked close to 300 before shrinking to ~25 in the 1970s, fewer than 20 mills when the SEM began, and just 3 operational mills in 2019. The limited liquidity and complex shareholding structures of select listed companies and the prevalence of common shareholding structures among listed companies reflect the family-owned nature and the subsequent consolidation of sugar industry enterprises.

The majority of today's conglomerates have either been consolidating their stakes in listed subsidiaries or quite simply absorbed them through takeover bids or amalgamations.[18] The number of domestic listings has shrunk from ~100 a decade ago to just over 70 in 2019. The end result is that the SEM today is home to few single-sector "pure plays" and to many large, multi-sector holding companies that are both highly diversified and complex. Adding to the complexity is the recent creation, by some companies, of a separate class of voting-only shares to be held by the founding families, therein reducing the risk of hostile takeover bids. The limits on foreign ownership of sugar companies—stemming from restrictions of foreign ownership of real estate in Mauritius—coupled with the manner in which they joined the SEM and the complexity of their operations would seem to explain the limited foreign participation in this category of companies.

Most of the listed consumer companies are among those established in the 1960s to produce fast-moving consumer goods (both food products and household necessities) to replace imports. Travel and leisure companies (hotels, airlines, and betting/gaming companies) make up 8% of market cap and 16% of trades. In a quest for higher yields in the post-crisis world of low interest rates, REIT-type companies are not only being sought by Mauritian retail and institutional investors but also attracting interest from overseas portfolio managers focusing on real estate. The result is a gain in prominence for this sector, which now makes up 16% of market cap and 8% of trades on the SEM, compared with 4% and 2%, respectively, a decade ago.

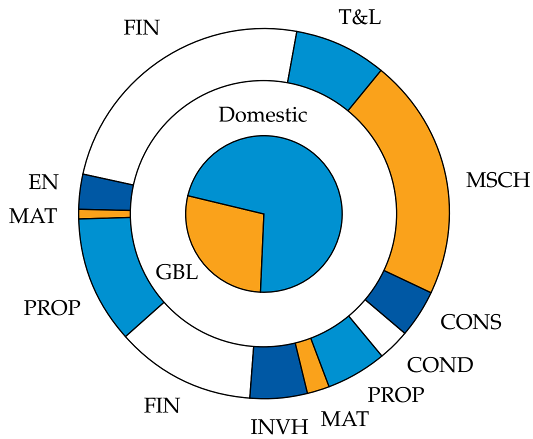
The financial sector is the largest sector in size and trade (36% of market cap and 46% of trades) and represents the overwhelming majority of foreign investor participation on the SEM. Here, we find the largest companies by market cap as

[17]See http://edbmauritius.org/opportunities/financial-services/fs-overview/.

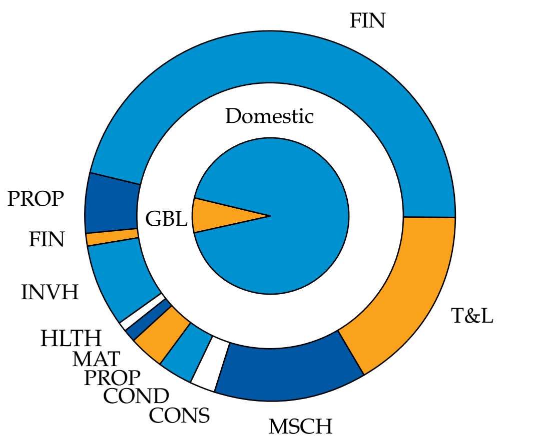
[18]See **Figure 2**.

FIGURE 2. SECTOR DISTRIBUTION OF EQUITIES ON THE SEM

A. Sector Distribution of Market Cap



B. Sector Distribution of Turnover



Note: FIN = financial services, T&L = travel and leisure, MSCH = multi-sector conglomerate/holding, CONS = consumer staples, COND = consumer discretionary, PROP = property, MAT = materials, HLTH = healthcare, INVH = investment holdings, EN = energy.

well as the most liquid, some of which are constituents of the MSCI Frontier Markets Index. This segment is made up of three banks, two non-bank lenders, and three insurers, as well as one of their life subsidiaries.

As part of its internationalisation strategy, the SEM, through its multicurrency platform and the development and growth of Mauritius as an international financial centre (IFC), has been able to attract Africa-, Europe- and Asia-based companies to list in Mauritius. The first such company joined in 2012, and in just seven years, this figure has grown to 22 (as of end-June 2019). The majority of these newer listings are income-generating REIT-type companies (40% by market cap) and financials (40% by market cap). Although a lot of these new listings do not see much trading activity, the handful that do trade have made a significant contribution to improving liquidity on the SEM. The last high-profile domestic listing, that of the lotto company Lottotech Ltd (LOTO), is proof that attracting new investors and improving liquidity are achievable. Some 8,000 new securities accounts have been opened, and over 12,000 investors subscribed to the initial public offering, asking for three times more shares than were made available.

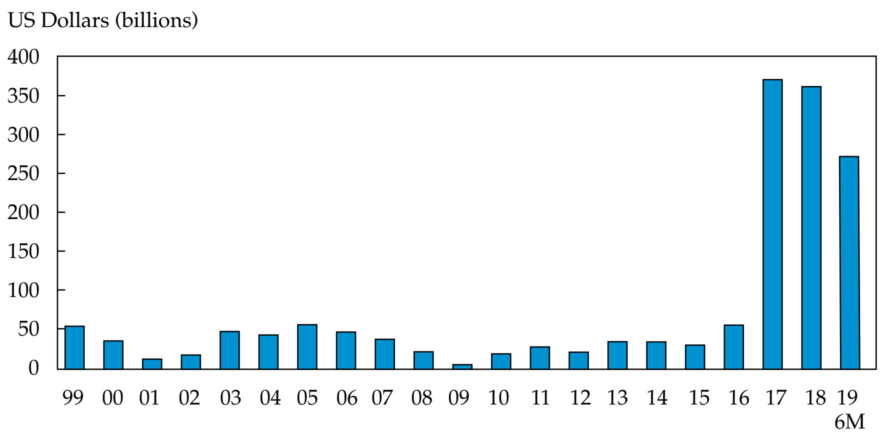
THE DEBT MARKET

Mauritian debt has been largely domestic, but a secondary market for sovereign debt was nonexistent until the revision of the primary dealer system in 2017. Instead of eligible banks and select institutions participating directly in primary auctions—and thus any successful bids/allocations being held to maturity—the revision trimmed the number of primary dealers to four banks. Prior to this change, liquidity was generally provided by the Bank of Mauritius's secondary market cell (SMC). Under the new primary dealer system, however, banks are required to categorise 60% of their domestic sovereign debt holdings as available for sale. Primary dealers are also required to act as market makers and flag all trades on Bloomberg's E-Bonds system. The effect has been a dramatic pickup in secondary market activity, as shown in **Figure 3**, which in turn enabled the development of a unified yield curve for Mauritius.

The secondary corporate debt market was reignited prior to the establishment of an active secondary sovereign debt market and the yield curve. In 2011, a convertible corporate bond was issued, which arguably kick-started a boom in debenture listings. At the end of June 2019, the nominal value of corporate debt listed on the SEM stood above USD1 billion (MUR37 billion), and it is composed of over 50 tranches of corporate debt issued by some 20 different companies (as of the end of 2018). As with the equity board, the SEM's debt board can handle debt securities in multiple currencies, with one in four tranches denominated in a currency other than the MUR.

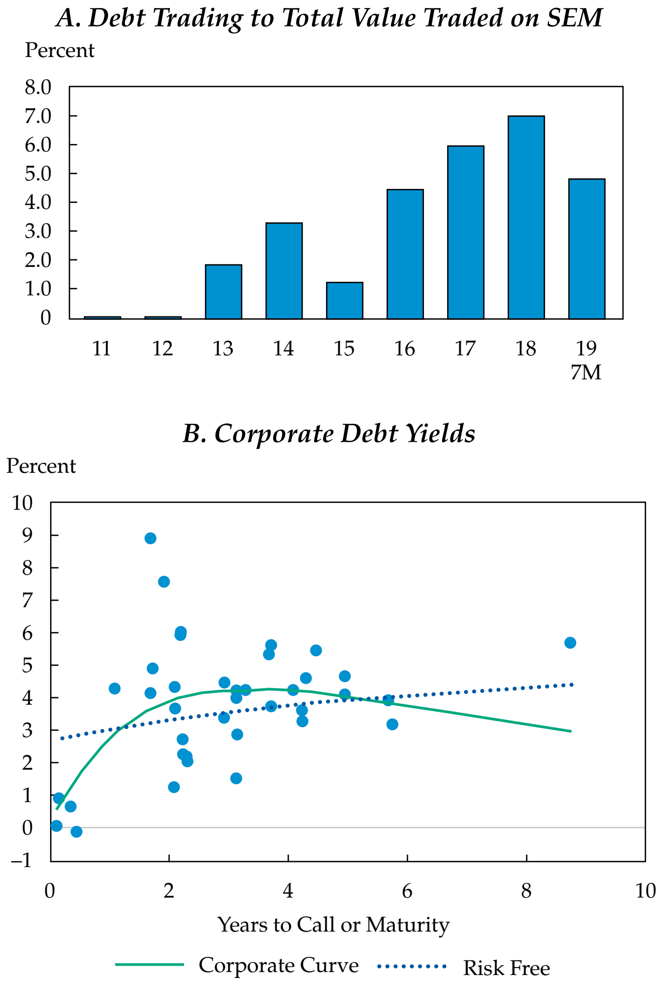
Another quirk of the Mauritian corporate debt market is the prevalence of floating coupon rates: For every five tranches, two carry fixed coupons and three carry floating coupons. The floating-rate bonds are usually linked to the Bank of Mauritius's benchmark interest rate ("key repo rate") when denominated in MUR and to three- or six-month LIBOR or EURIBOR rates for non-MUR tranches. The SEM also hosts six preference shares. The central bank has issued 66 tranches of a quasi-risk-free "3Y Golden Jubilee Bond" restricted to retail Mauritian investors for a combined USD250 million (MUR9 billion), which can be traded on the SEM for a nominal fee (1 bp). Between August 2019 and December 2019, the central bank issued yet another quasi-risk-free bond programme—the "Silver Bond." This one is aimed at retail investors aged 50 and older, offering quarterly coupons and flexibility in redemption. At the end of July 2019, the SEM housed over USD1.3 billion (MUR47 billion) in terms of issued value to all these different classes of fixed-income securities, in contrast

FIGURE 3. AVERAGE MONTHLY TURNOVER ON THE SECONDARY GOVERNMENT DEBT MARKET



Note: Excludes exceptional Bank of Mauritius SMC transactions in 2007.

FIGURE 4. EVOLUTION OF TRADING ON THE SEM'S DEBT BOARD AND YIELDS



Note: Data are as of the end of July 2019.

to USD25 million (MUR730 million) just eight years earlier.

Between 2013 and 2015, trading on the SEM's debt board accounted for ~2% of total value traded, as shown in Panel A of **Figure 4**, and has since averaged around 6%. Given the strong appetite for bonds, it is fairly trivial to match a sell offer against a lengthy waitlist of bidders in the debt market. Consequently, corporations have been issuing bonds as a cheaper alternative to traditional bank loans. These have mostly been placed with a handful of institutional investors—including banks—therein limiting liquidity on the secondary market. Because of its youth, limited liquidity, and absence of credit ratings,[19] this debt market appears to suffer from a pricing mismatch as best exemplified by the fact that several tranches carry yields-to-maturity (YTM) below the Mauritian risk-free curve, as illustrated in Panel B of Figure 4.

FUTURE DEVELOPMENTS

The development of corporate debt is the first step toward an enhanced financial market for Mauritius. Mauritian capital markets need to move away from vanilla offerings and strive for greater sophistication. The ability to lend securities, the introduction of short selling, and the development of derivatives would surely open doors to a plethora of new opportunities for market participants and investors alike.

The adoption of Financial Information eXchange (FIX) protocols, as well as enhanced settlement mechanisms, would allow securities to move more freely across exchanges and platforms, thus reducing intermediaries and enabling the reduction in settlement times from T+3 to T+2.

Mauritians are conservative investors who tend to prefer bank deposits, term deposits, and property purchases as means to enhance their savings and wealth. A limited understanding of investing in stocks, bonds, and other asset classes, such as gold,[20] is one of the main factors restricting expansion of the number of securities accounts with the CDS from its current ~100,000.[21] Finally, enhancing the diversity and depth of listings by attracting telecommunication companies, a greater variety of manufacturers, and utilities would also enhance both market attractiveness and liquidity.

[19]There is only one credit ratings agency licensed by the FSC since May 2015 and just 1 out of the listed 50 tranches that has been rated.

[20]Accessible as an ETF.

[21]This is tiny given that almost every Mauritian is banked. The two largest retail banks have ~2 million customers for a population of 1.3 million, which strongly hints that a significant fraction of Mauritians use more than one bank.