IDLC MONTHLY

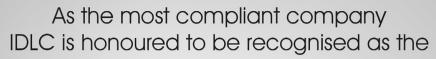
BUSINESS WERE WIEW

LAUNCH OF ELECTRIC VEHICLES IN BANGLADESH:
HITTING THE ROAD TO ACHIEVE
THE DREAM OF ZERO CARBON FOOTPRINT









2nd Highest Taxpayer in the Country

in the Non-Banking Financial Institution Category by the National Board of Revenue



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Launch of Electric Vehicles in Bangladesh: Hitting the Road to Achieve the Dream of Zero Carbon Footprint

While achieving "Net Zero" is becoming a burning issue, the transportation sector, which is a part of our daily lives, is itself responsible for 37% of global carbon dioxide emissions because of its high dependence on fossil fuels. As a part of the global movement, Bangladesh is committed to reducing 21.85% of carbon emissions by 2030. It is a matter of hope that the country contributes only 0.21% of global carbon dioxide emissions, which is far less than the neighbouring country, India. But it is growing at an alarming average annual rate of 7.52%. As the yearly emission of electric vehicles is 77.63% less than conventional fossil-fuel-run vehicles, the launch of electric vehicles can gear up the pace of the country's journey towards zero carbon footprint.

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FROM THE

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Launch of Electric Vehicles in Bangladesh: Hitting the Road to Achieve the Dream of Zero Carbon Footprint

Despite being an integral component of our daily life, transportation accounts for 37% of the world's carbon dioxide emissions due to its heavy reliance on fossil fuels. However, people are inclined towards electric vehicles (EVs), as reflected in a recent study, which shows EVs account for 8.57% of total automobile sales in 2021 globally, demonstrating the exponential growth potential of the electric vehicle sector.

The electric car industry in Bangladesh is on the rise, as growth of 154% in hybrid car imports from 3,296 units in FY18 to 8,366 units in FY21 has been observed. Increased fuel prices and lower maintenance costs have driven the increase in sales. This adoption has

enabled new ventures and start-ups to focus on developing locally manufactured EVs.

Few to no charging hubs, high import duties and misconceptions around the EV currently stand as a roadblock to the bright prospects of this industry. However, it shows promise as the government progresses towards "Vision 2041," which will enable electric vehicles to run the streets of Bangladesh in full swing.

Md. Shah Jalal

Assistant Manager, CRM-SME IDLC Finance Limited

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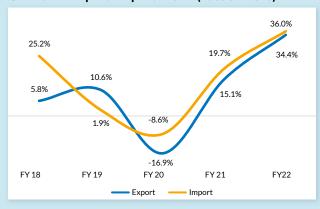
AKHLAQUR RAHMAN SACHEE

TASNIMUL HASAN RUHI



EXPORT-IMPORT

Growth in Export-Import Trade (Last 5 Years)



Export and Import Growth (Last 12 Months)

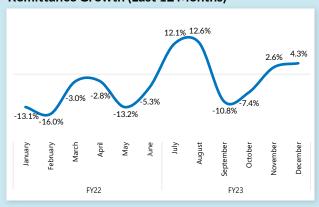


REMITTANCE

Remittance Growth (Last 7 Years)

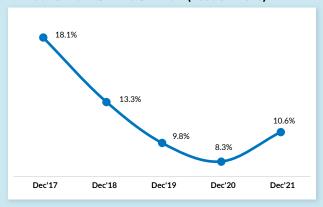


Remittance Growth (Last 12 Months)

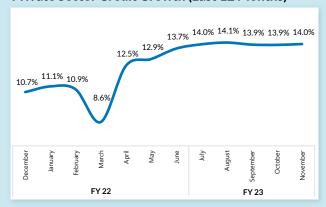


PRIVATE SECTOR CREDIT GROWTH

Private Sector Credit Growth (Last 5 Years)



Private Sector Credit Growth (Last 12 Months)



- According to the Export
 Promotion Bureau (EPB), exports
 from Bangladesh surpassed
 the USD 5 billion milestone in
 November 2022 for the first time
 ever. According to the most recent
 EPB statistics, exports in the first
 five months of FY23 increased by
 11% in comparison to the same
 period of the previous year.
- Bangladesh is expected to be the seventh largest recipient of remittances in the world this year, as per the World Bank's most recent report. However, remittance inflow to Bangladesh will experience a drop of USD 1 billion from the USD 22 billion received in the previous year.
- Bangladesh's RMG exports to the US surged by 50.98% in January 2022-September 2022 compared to the same period in 2021, making the country US's third largest apparel supplier.
- Bangladesh has the ability to clear import payments for four months considering the country's net forex reserves, according to the announcement made by the Centre for Policy Dialogue (CPD) on December 17, 2022.
- In terms of the gross flow of USD 940 million for fiscal year 2022, China has become Bangladesh's largest foreign direct investment source nation.

- As a result of the government and Bangladesh Bank's several measures, remittance inflows increased to some extent in the month of November 2022.

 Remittance inflows grew to USD 1.59 billion in November in comparison to USD 1.55 billion in the same month of the previous financial year.
- The overall inflation rate dropped to 8.85% in November 2022 from 9.52% in August 2022, which was the highest in a decade.
- The Ministry of Finance has recommended a target GDP growth rate of 6.5% for FY2022-23, in line with the estimates of economists around the country.

- The Bangladesh Jewellers'
 Association (Bajus) took the decision to raise the prices of gold by 4%, amounting to BDT 3,033 per bhori on December 03, 2022. Buyers now have to pay BDT 87,247 for each bhori of 22-carat gold.
- At a meeting held on December 12, 2022, the central bank announced that the 9% lending rate cap will not be removed for corporate and industrial loans.
- Bangladesh
 Bank (BB) has
 opted to declare
 monetary policy
 twice a year, as
 recommended
 by the
 International
 Monetary Fund
 (IMF).

APPAREL EXPORT GROWTH
TO NON-TRADITIONAL
MARKETS SUCH AS JAPAN,
KOREA AND AUSTRALIA
ALSO CONTRIBUTED TO THIS
ACHIEVEMENT.

AHM Ahsan, Vice-Chairman of Export Promotion Bureau, on November Export Hitting All-time High, Crossing USD 5 Billion Mark. (December 01, 2022. The Business Standard.)

China has been the largest trading partner of Bangladesh for the past 12 consecutive vears.

Song Yang, Economic and Commercial Counsellor of Chinese Embassy, on China Being the Largest FDI Source of Bangladesh. (December 18, 2022. The Financial Express.) Bangladeshi
exporters are
resilient and
they know how
to survive in the
stormy weather
conditions

Faruque Hassan, President of Bangladesh Garment Manufacturers and Exporters Association, on Export Standing Out in Turbulent Year. (December 21, 2022. The Daily Star.)

Due to good governance, these institutions have low non-performing loans and are able to make profits.

Mominul Islam, President of Bangladesh Leasing and Finance Companies Association, on NBFIs Logging Record Foreign Investment to Equity Capital in FY22. (December 21, 2022. The Business Standard.) In other countries, headline inflations have now started to come down after reaching double digits. So, the falling trend in our country matches with the global pattern.

MA Mannan, Minister of Planning of Bangladesh, on Inflation Dropping to 8.85% in November. (December 05, 2022. The Business Standard.)

There is no opportunity to block investments abroad by individuals and institutions...As a result [of these investments], domestic institutions will be recognised in foreign countries. In addition, the amount of investment by foreign institutions will also increase.

Ahsan H Mansur, Executive Director of Policy Research Institute of Bangladesh, on Bangladeshi Firms' Investments Abroad Rising 19% in FY22. (December 21, 2022. The Business Standard.)

While China and Vietnam had the larger share of the US' total apparel import, Bangladesh saw better export growth than these countries.

Md Mohiuddin Rubel, Director of Bangladesh Garment Manufacturers and Exporters Association, on Bangladesh's Apparel Shipment to US Rising 51% during January-September. (December 04, 2022. United News of Bangladesh.)

The central bank has always taken effective measures to balance the import-export flow. We will appreciate the authorities if the central bank forms such a scheme in taka.

Mohammad Hatem, Executive President of Bangladesh Knitwear Manufacturers and Exporters Association, on Bangladesh Bank's Decision to Downsize Export Development Fund. (December 27, 2022. The Business Standard.)

International retailers and brands are cutting their reliance on China and moving to countries such as Bangladesh, Vietnam and Cambodia.

Md Saiful Islam, President of Metropolitan Chamber of Commerce and Industry, on Export Standing Out in Turbulent Year. (December 21, 2022. The Daily Star.)



| Country | Nominal GDP: 2021 (USD in Billion) | Real GDP Growth: 2021 (Yearly % Change) | | tion Point to Point (%) | Current Account Balance: (% of GDP) | Interest Rates (%), Ten years Treasury Bond | Currency Units (Per USD) |
|-------------------|---|--|-------|----------------------------|--|--|--------------------------------|
| Frontier Market | | | | | | | |
| Sri Lanka | 88.98 | 3.58 | 57.20 | December-22 | -3.76 | 28.76 | 367.69 |
| Vietnam | 366.20 | 2.58 | 4.55 | December-22 | -1.96 | 4.87 | 23,450.00 |
| Kenya | 110.52 | 7.23 | 9.10 | December-22 | -5.20 | 14.33 | 123.73 |
| Nigeria | 441.54 | 3.65 | 21.47 | November-22 | -0.42 | 13.51 | 450.05 |
| Bangladesh | 465.00 | 7.25 | 8.71 | December-22 | -4.02 | 8.33 | 105.25 |
| Emerging Markets | | | | | | | |
| Brazil | 1,608.00 | 4.62 | 5.79 | December-22 | -1.74 | 12.81 | 5.27 |
| Saudi Arabia | 833.54 | 3.24 | 2.90 | November-22 | 5.32 | N/A | 3.75 |
| India | 3,176.30 | 8.95 | 5.88 | November-22 | -1.22 | 7.31 | 81.76 |
| Indonesia | 1,187.32 | 3.69 | 5.51 | December-22 | 0.28 | 6.95 | 15,547.50 |
| Malaysia | 373.03 | 3.13 | 4.00 | November-22 | 3.80 | 3.99 | 4.37 |
| Philippines | 394.09 | 5.60 | 8.10 | December-22 | -1.76 | 7.16 | 54.84 |
| Turkey | 817.51 | 10.99 | 64.27 | December-22 | -1.66 | 8.96 | 18.78 |
| Thailand | 505.90 | 1.57 | 5.89 | December-22 | -2.18 | 2.39 | 33.59 |
| China | 17,744.00 | 8.08 | 1.60 | November-22 | 1.79 | 2.93 | 6.78 |
| Russia | 1,778.53 | 4.70 | 12.00 | November-22 | 6.88 | 10.38 | 69.58 |
| Developed Markets | | | | | | | |
| France | 2,957.43 | 6.98 | 5.90 | December-22 | 0.36 | 2.78 | 0.93 |
| Germany | 426.77 | 2.79 | 8.60 | December-22 | 7.36 | 2.28 | 0.93 |
| Italy | 2,101.28 | 6.64 | 11.60 | December-22 | 2.44 | 4.23 | 0.93 |
| Spain | 1,426.22 | 5.13 | 5.80 | December-22 | 0.92 | 3.31 | 0.93 |
| Hong Kong | 369.16 | 6.42 | 1.80 | November-22 | 11.27 | 3.30 | 7.81 |
| Singapore | 396.99 | 7.61 | 6.70 | November-22 | 18.12 | 2.92 | 1.33 |
| United States | 22,996.08 | 5.68 | 7.10 | November-22 | -3.68 | 3.58 | 1.00 |
| Denmark | 398.30 | 4.13 | 8.70 | December-22 | 8.75 | N/A | 6.94 |
| Netherlands | 1,013.52 | 5.04 | 9.60 | December-22 | 9.04 | 2.61 | 0.93 |
| Australia | 1,635.26 | 4.69 | 7.30 | September-22 | 3.15 | 3.75 | 1.46 |
| Switzerland | 799.80 | 3.72 | 2.80 | December-22 | 9.45 | 1.34 | 0.92 |
| United Kingdom | 3,187.63 | 7.44 | 10.70 | November-22 | -2.59 | 3.61 | 0.82 |

[&]quot;Bangladesh Data: The new GDP size (FY22 provisional estimate) and real GDP growth (FY22) are as per new base year. Calculation Method of CA balance (% of GDP) = CA balance of FY22 / Provisional GDP of FY22

Interest rate (%) 10 years TB as per December 2022, Inflation as per December 2022 and Currency Unit (per USD) as per 4th January are sourced from Bangladesh Bank "

 $\textbf{Nominal GDP:} \ Data of all \ countries \ apart from \ Bangladesh \ is \ sourced \ from \ IMF \ estimates \ of \ 2022 \ data \ (October, 2022 \ Outlook)$

Real GDP Growth and Current Account Balance: Data of all countries apart from Bangladesh is sourced from IMF estimates of October, 2022 data (World Economic Outlook, October 2022)

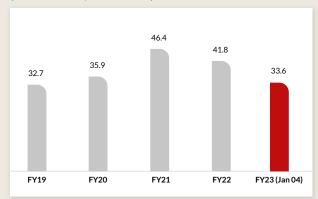
 $\textbf{Inflation:} \ \mathsf{Data} \ \mathsf{of} \ \mathsf{all} \ \mathsf{countries} \ \mathsf{apart} \ \mathsf{from} \ \mathsf{Bangladesh} \ \mathsf{is} \ \ \mathsf{sourced} \ \mathsf{from} \ \mathsf{tradingeconomics.com}$

Interest rates 10 years TB and Currency Unit: Data of all countries apart from Bangladesh is sourced from Investing.com



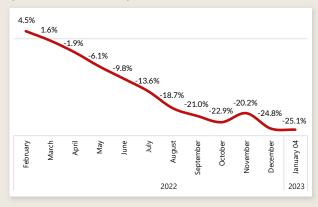
Foreign Exchange Reserve

(In USD Billion, Last 5 Years)



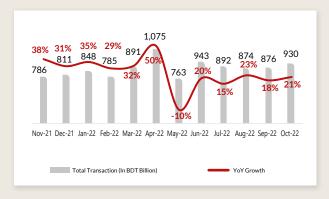
Foreign Exchange Reserve

(Last 12 Months Trend)



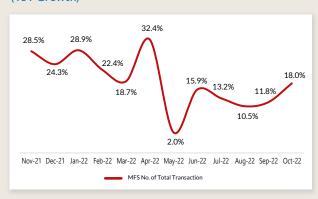
MFS Monthly Transaction

(BDT Billion and YoY Growth)



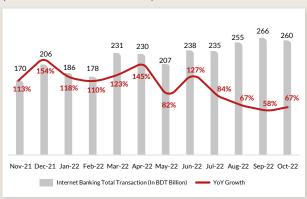
MFS No. of Total Transaction

(YoY Growth)



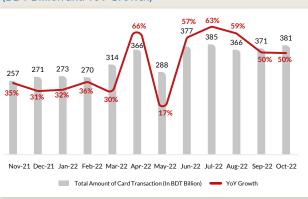
Total Amount of Internet Banking Transaction

(BDT Billion and YoY Growth)



Total Amount of Card Transaction

(BDT Billion and YoY Growth)



Source: Bangladesh Bank

EduHive



Md. Nazmul Haque Sarker Co-Founder and CEO, EduHive Interviewed by

Tasnimul Hasan Ruhi, Team MBR

EduHive is one of the fastest-growing e-learning platforms in Bangladesh, igniting a spark of education in the minds of 40 million students. Its mission is to make quality education accessible and affordable for the students of Bangladesh. In just 3 years, they have reached more than 300,000 students with 20,000 monthly active users. The EduHive team is dedicated to empowering students, helping them reach their potential, and giving them the education they deserve. Team MBR was in a conversation with Md. Nazmul Haque Sarker, Co-Founder and CEO, EduHive, to learn about his inspirations and vision behind EduHive.

Tasnimul Hasan Ruhi: EduHive has been around for more than four years and has more than three hundred thousand active students. What was your motivation behind starting this successful venture?

Md. Nazmul Hague Sarker: As the son of a teacher, I inherited a deep-seated passion for teaching. My journey began as I studied at the University of Dhaka and took on the role of a teacher at various coaching centres. It was there that I encountered the struggles of students who, like me, had left their homes and families to chase their dreams in the city. I saw firsthand the indecision, the difficulties of adapting to a new environment, the endless traffic, the insecurity that many female students felt, and the

constant financial struggles. These challenges broke

my heart, and I watched as many bright and ambitious students lost hope and abandoned their dreams. My

co-founders and I understand these struggles all too

EduHive

well, and we have come together to make a change. Through the digitisation of education, we can ensure that all students in Bangladesh have access to quality education, regardless of their background and financial constraints. Together, we can empower students to reach for the stars and build a brighter future for themselves and their country.

Tasnimul Hasan Ruhi: Would you please share with us a brief overview of your business and its various operations?

Md. Nazmul Haque Sarker: EduHive is an online education platform that provides students with access to a wide range of educational resources, including e-books,

smart notes, PDF notes, recorded classes, and live classes. We offer a cost-effective subscription model, with options for monthly or yearly access to different levels of content. With the Basic package, students can prepare for exams with basic exam prep materials,

while the Advanced package provides a comprehensive study solution with access to model tests from multiple teachers and institutions. The platform allows students to take exams online and receive their results instantly, as well as track their progress as they work towards their goals. EduHive is a game-changer for students, providing an accessible, affordable, and efficient way to excel in their studies.

Tasnimul Hasan Ruhi: Several EdTech platforms have already proven their worth as a result of rapid digitalisation and a shift in focus to online trends. In what aspects would you differentiate yourself from them?

Md. Nazmul Haque Sarker: At EduHive, we understand the importance of providing not just the right resources but resources of the highest quality. That is why we pride ourselves on the comprehensive content we offer, covering every aspect of the syllabus to give students the guidance they need to succeed. We do not just stop there. We empower our students to take charge of their own learning and to use technology to do it. Our blended learning approach blends traditional teaching methods with technology to create a personalised, engaging, and effective learning experience. We know that this is not just about the students. It is also about creating positive change in communities. That is why we have carefully planned and strategised our approach, working with top-notch coaching centres to create physical touchpoints and revolutionise teaching and learning practices. At EduHive, we believe that with the right tools, guidance, and support, every student has the potential to reach their dreams.

Tasnimul Hasan Ruhi: We know the pandemic has created a surge in online education platforms, with people being under lockdown. How would you say the response of the students has been as we are back to a relatively normal life?

Md. Nazmul Haque Sarker: EduHive's operation started even before the pandemic, which has helped us adapt to the changing needs of parents and students. Our platform is designed to provide quality learning from home, and we strive to ensure continuity and

growth in study hours. With a daily watchtime of over 40,000 minutes, it is evident that our students are highly engaged and motivated to learn through our platform. As the world navigates the challenges of the pandemic, more and more families are adopting online platforms as an alternative solution for their learning journey. At EduHive, we understand that every student is unique and may have their own set of challenges when it comes to online learning. That is why we provide regular check-ins, support, interactive multimedia content, and flexible scheduling options to ensure the success of all our students in their online learning journey.

Tasnimul Hasan Ruhi: EduHive has received the "Excellence" in E-Learning Award at the National Youth Career Carnival 2021. Would you share your opinion on the events that led you to receive such a prestigious award?

Md. Nazmul Haque Sarker: Winning the award for "Excellence" in E-Learning on a national platform is a truly humbling experience for the EduHive team. It is a recognition of the hard work, dedication, and passion that we put into providing students with the best education and resources possible. During the pandemic, our platform served nearly 1 lakh students. Besides that, we made all our services free for all during the first phase of the COVID-19 outbreak so that students could continue their learning during those uncertain times. We quickly adapted to online live classes and enabled test prep for university admissions tests. Our efforts also contributed to developing video classes to broadcast on Bangladesh TV for Class 6-10 (both general and madrasa education), vocational, and diploma engineering courses under the Ministry of Education. The award is a culmination of our tireless efforts in creating a platform that truly transforms lives and empowers students to thrive.

Tasnimul Hasan Ruhi: You are currently working with over a hundred coaching centres, such as OMECA, ICON, UCC, and many others. What are the unique aspects of these partnerships?

Md. Nazmul Haque Sarker: With 16 years of experience in collaborating with coaching centres, I

have had the opportunity to observe the struggles of students, particularly those who hail from outside of Dhaka, as they navigate the challenges of time, cost, and barriers in selecting and attending coaching centres. As a result, I have made it a personal mission to bring offline exams online, providing students with a unique and unparalleled experience. One of our unique selling points is our test prep, which allows students to self-assess and evaluate their performance in a proper manner, providing them with instantaneous results and enabling them to gauge their progress and make necessary adjustments to their approach. My extensive tenure as an educator/teacher has facilitated the formation of personal relationships with the owners and directors of these coaching centres, which has proven instrumental in convincing them of the value of this blended approach and how it can benefit both their students and their businesses.

Tasnimul Hasan Ruhi: EduHive has already created more than five thousand videos to enlighten the users of the platforms. What plans do you have for the future of EduHive?

Md. Nazmul Haque Sarker: Our plan is to gradually cover all other classes with the new curriculum, thus becoming a one-stop-learning solution. Additionally, we are doing research on how we can make our recorded classes more interactive and based on real-life examples. Utilising modern technologies such as VR and AR, we aim to enable students to learn through visualisation instead of just imagination, thus creating a more immersive learning experience. We strive to be a leader in the EdTech industry, making a real

impact on the lives of students and shaping the future of education for the better. We remain steadfast in our dedication to providing personalised and tailored learning experiences, catering to the specific needs of each student, and providing them with the necessary support to achieve their goals. We also conduct thorough research to understand the feedback from our users and stakeholders to continually identify areas for improvement and ensure that our platform is meeting the needs of its users.

Tasnimul Hasan Ruhi: You have established EduHive as a prospective EdTech company. What are the challenges you faced while making this journey?

Md. Nazmul Haque Sarker: EduHive is a leading EdTech platform that has faced and surmounted many obstacles with its exceptional team and determination. We have succeeded in convincing traditional coaching centres to overcome their fear of losing the privacy of their contents and revenue streams and helped them switch to online mode by demonstrating the clear advantages to students and their businesses. Parents' trust is of paramount importance, but we remain confident that our consistent, high-quality services will continue to earn and retain their trust. We are undeterred by the challenges of slow internet in rural areas, and we are confident that through collaboration with key stakeholders, including the government, we will find solutions that allow all students to access our video streaming on demand. Invest in EduHive and be part of shaping the future of education as we continue to break barriers and bring the best possible education to all students.





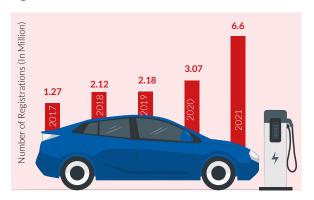
COVER STORY

While achieving "Net Zero" is becoming a burning issue, the transportation sector, which is a part of our daily lives, is itself responsible for 37% of global carbon dioxide emissions because of its high dependence on fossil fuels. As a part of the global movement, Bangladesh is committed to reducing 21.85% of carbon emissions by 2030. It is a matter of hope that the country contributes only 0.21% of global carbon dioxide emissions, which is far less than the neighbouring country, India. But it is growing at an alarming average annual rate of 7.52%. As the yearly emission of electric vehicles is 77.63% less than conventional fossil-fuel-run vehicles, the launch of electric vehicles can gear up the pace of the country's journey towards zero carbon footprint.

Global Electric Vehicle Market Outlook

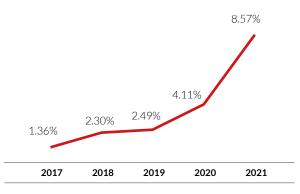
The global electric vehicle market is growing exponentially. As per a report published by the International Energy Agency, 6.60 million units of electric cars, combining the sales of battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs) together, were sold in 2021. Sales of electric cars contributed 8.57% of global sales of cars. The number of electric cars running on the streets globally now stands at 16.50 million units as of 2021. China alone accounted for 3.30 million units of sales and had 7.80 million electric cars running on its streets as of 2021. This impressive scenario resulted from the government's effort to reduce carbon emissions as a part of the country's 14th Five-Year Plan (2021-2025). On the other hand, 2.30 million units of electric cars were sold in the year 2021 in Europe, which is 65% higher than the previous year. The European market grew at a compound annual growth rate of 61% during the period 2016-2021. The proportion of electric car sales was higher in Norway, Iceland, Sweden, the Netherlands, France, Italy, and Spain than in others. As of 2021, 5.50 million units of electric cars were on the roads of Europe. In the United States, 630,000 units of electric cars were sold in 2021. The country has over 2 million electric cars on the streets. However, the US electric car market experienced a compound annual growth rate of 32% during the period 2016-21.

Figure 01: Global Sales of Electric Cars



Source: International Energy Agency

Figure 2: Share of Electric Cars in Global Sales of Cars



Source: International Energy Agency

In some Asian countries like China, India, and Vietnam, electric two and three-wheelers have gained popularity over the years. Because of their simple manufacturing process and low operating costs, sales increased rapidly. Around 9.50 million units of electric two and three-wheelers were sold in China in 2021. 0.30 million units and 0.23 million units were sold in India and Vietnam, respectively.

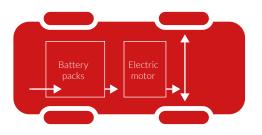
Sales of electric buses and trucks are relatively lower than those of cars. Electric buses and trucks accounted for only 0.30% of total sales in this segment in 2021. Globally, 4% of the buses and 0.10% of the trucks are electric variants as of 2021.

Engineering Aspects of Electric Vehicles

Different types of electric vehicles have been developed over the years to give potential buyers choices. Electric vehicles either run on electric motors or the electric motors work in conjunction with internal combustion engines. Depending on how they operate, electric vehicles can be classified into three broad categories.

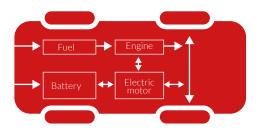
1. Battery Electric Vehicles (BEVs): Battery electric vehicles are also called all-electric vehicles, as these vehicles run with the help of electric motors only. There is no internal combustion engine. Hence, these vehicles generate no emissions. The electric motors are powered by batteries, and there are very few moving parts, which results in a lower cost of maintenance. There can be one or more electric motors, depending on the models. Tesla Model 3, Volkswagen ID.4, Kia EV6, BMW i3, etc. are some of the popular battery electric vehicles.

Battery Electric Vehicle (BEV)



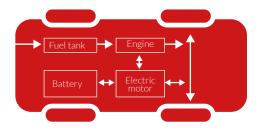
2. Plug-in Hybrid Electric Vehicles (PHEVs): Plug-in hybrid electric vehicles are also called series hybrids. A plug-in hybrid electric vehicle has both electric motors and an internal combustion engine. These vehicles can be operated in two modes. In all-electric mode, a plug-in hybrid electric vehicle runs only with the help of electric motors. Whereas, in hybrid mode, electric motors and an internal combustion engine power the vehicle together. The batteries can be charged externally. Also, the regenerative braking system is there. Plug-in hybrid electric vehicles offer higher fuel efficiency while performing in line with conventional cars. Some of the popular choices of plug-in hybrid electric vehicles are Toyota Prius, Mitsubishi Outlander PHEV, Hyundai Sonata, etc. However, the emission is higher than battery-powered all-electric vehicles.

Plug-in Hybrid Electric Vehicles (PHEVs)



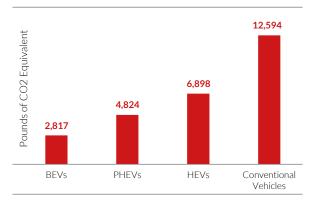
3. Hybrid Electric Vehicles (HEVs): A hybrid electric vehicle has both electric motors and an internal combustion engine, like plug-in hybrid electric vehicles. However, the batteries cannot be charged externally. They are automatically charged with the help of the regenerative braking system. Most hybrid electric vehicles cannot run on batteries alone. The electric motors mainly assist the internal combustion engine to offer better fuel economy. The emissions are higher than those of battery electric vehicles and plug-in hybrid electric vehicles. Toyota Camry Hybrid, Honda Civic Hybrid, MG ZS, etc. are some of the popular hybrid electric vehicles.

Hybrid Electric Vehicles (HEV)



It is to be noted that plug-in hybrid electric vehicles and hybrid electric vehicles produce emissions that are directly released through the tailpipes. Though battery electric vehicles do not produce direct emissions, there can be evaporative emissions.

Figure 3: Comparison of Emissions by Different Types of Vehicles



Source: Alternative Fuels Data Center

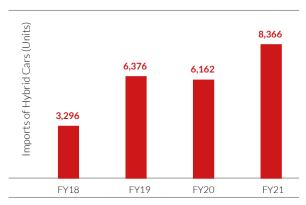
There are more than 450 models of electric vehicles available on the global market. All-electric vehicles mostly come with sedan-style bodies, whereas most of the electric cars with SUV-style bodies are plug-in hybrid electric vehicles. However, the range of choices is widening every day, as some of the most renowned car

manufacturers are planning to shift to electric vehicles completely. Toyota is targeting to sell 3.50 million units of electric cars annually by 2030. Volvo is aiming to transform into a fully electric car manufacturer by 2030. Mercedes will only launch fully electric vehicles from the year 2025 and BMW is committed to ensure 50% of the vehicles sold being fully electric by 2030.

Progress of Electric Vehicle Market in Bangladesh

The all-electric vehicle market is almost nonexistent in Bangladesh. However, the country is experiencing consistent growth in the imports of hybrid electric vehicles. A growth of 154% in hybrid car imports from 3,296 units in FY18 to 8,366 units in FY21 has been observed. Lower cost of maintenance and better fuel economy have driven the growth in sales. Hybrid variants of Toyota Aqua, Honda Grace, and Nissan X-Trail have gained much popularity in Bangladesh. Also, there are nearly 4 million electric three wheelers running on the streets of the country. These vehicles are known as 'Easy Bikes' to the masses. Though easy bikes are not allowed on the streets of the capital, these vehicles have already become the primary vehicles for public passenger transportation in rural areas. Because easy bike owners use environmentally polluting leadacid batteries and illegal electricity connections to charge the batteries, the industry is quite controversial. Also, easy bikes have safety issues due to their design.

Figure 4: Imports of Hybrid Cars in Bangladesh



Source: The Business Post

Nonetheless, the government is aiming to ensure mass adoption of electric cars by the year 2030. Through the Automobile Industry Development Policy, 2021, the government has announced its plan to undertake incentive programmes to promote strategic investments with the aim of penetrating regional and global markets with locally produced electric cars. To promote local production or assembly, tax benefits have been

proposed. Manufacturers of energy efficient vehicles will be able to enjoy tax holiday for 10 years, if they use 30% locally sourced components in the production process. A waiver of road tax and reduced registration fees will also be offered. A fund titled 'National Energy Efficient Vehicle Production Fund' will be created to support the industry.

The National Board of Revenue (NBR) has already proposed some amendments to ensure clarity of taxation for electric cars. As electric cars do not have engines, their capacities are expressed in kilowatts (KW). NBR has proposed a tax structure considering that 1 KW is equivalent to 20 cubic centimetres (CC). With the proposed amendment, the tax structure for electric cars now stands as below.

Table 1: Advance Income Tax (AIT) on Electric Cars

| Capacity | Tax (In BDT) |
|-----------------|--------------|
| Below 75 KW | 25,000 |
| 75 KW - 100 KW | 50,000 |
| 100 KW - 125 KW | 75,000 |
| 125 KW - 150 KW | 125,000 |
| 150 KW - 175 KW | 150,000 |
| Above 175 KW | 200,000 |

Source: Bangladesh Post

To provide guidance in establishing a wide network of charging stations, 'Electric Vehicle Charging Guidelines' have been prepared. The guidelines have suggested a framework for setting up private and commercial charging stations. The government is also planning to launch electric buses for long routes. As a part of this effort, Bangladesh Road Transport Corporation (BRTC) will procure 50 electric buses for long routes like Dhaka-Chattogram.

Manufacturing electric vehicles is also no longer a distant dream for Bangladeshis. Walton Automobile Project has already introduced its first electric bus. However, it will only be used to transport employees within the factory premises. Alongside, Bangladesh Auto Industries Limited (BAIL) is establishing a manufacturing plant on 100 acres of land at Mirsarai Economic Zone. Nitol Motors is also planning to launch its electric vehicle manufacturing plant at Ishwardi. However, both the projects are being delayed due to the disruptions created by the COVID-19 pandemic.

Startups are also performing well in this segment. Palki Motors Limited is a homegrown startup that is offering four-door, four-wheel, battery-swappable electric vehicles starting at BDT 4.99 lakhs. They have already received a good number of pre-orders for their vehicles. The startup is expecting to start delivering pre-ordered vehicles in early 2023. Baagh Eco Motors is another venture in this segment. They are offering electric vehicles with advanced technologies like IoT.

Challenges

The electric vehicle market in Bangladesh is currently in its infancy. To help this market grow and sustain, the government and the entrepreneurs in this segment need to step forward. Some of the challenges the industry is facing are listed below.



Infrastructure

Lack of electric vehicle friendly infrastructure in Bangladesh is one of the critical reasons for the growth of electric vehicle market to be sluggish. The country had only 14 electric vehicle charging stations, whereas the neighbouring country, India, had 933 as of December 2020. To popularize electric vehicles among mass people, wide availability of cost-efficient charging stations must be ensured. High-tech electric vehicles come with advanced features like autopilot, automatic emergency braking system, etc. To utilise the full potential of these features, our roads and highways also need to be renovated.



Affordability

The cost of car ownership is higher in Bangladesh in comparison to most other countries due to higher import duty, registration fees, and advance income tax. Though the country is graduating from the segment of least developed countries, owning a private car is still a luxury for the majority of our population. All-electric cars themselves are very expensive. Import duty and other relevant fees make them out of reach for most of the potential buyers. Our neighbouring country, India, has already cut down the registration fees by 50% for electric vehicles. Import duties have been reduced as well. More preferential tax treatments towards electric car owners will make the potential car buyers encouraged to go for electric cars.



Policy Support

The concept of converting between CC and KW to charge advance income tax has created some controversies among vehicle importers and manufacturers. They want electric cars to be classified based on horsepower. Also, they have expressed their urge to the government to further reduce registration fees and advance income taxes for electric vehicles. Also, a guideline addressing the design issues and safety concerns of the battery-run three-wheelers needs to be prepared so that the electric three-wheelers complying with this guideline can get official registration. According to a report published a few years ago, the easy bike market in Bangladesh is worth BDT 17,500 crore.



Misconceptions

Though hybrid electric vehicles are gaining popularity in Bangladesh, there is a misconception among buyers that the cost of replacing the batteries eventually offsets the savings on fuel during the lifetime of a hybrid electric vehicle. However, this is not the case. Also, there are misconceptions about the performance and reliability of electric cars. The vehicle importers and manufacturers should come forward and enlighten the buyers regarding the benefits of electric cars and the savings that car owners can enjoy by driving electric cars.

Key Points

- Yearly emission of electric vehicles is 77.63% less than conventional fossil-fuel-run vehicles.
- 6.60 million units of electric cars were sold in 2021 globally, with a contribution of 8.57% to global sales of cars.
- China is the country with the highest numbers of electric cars (7.80 million units) running on its streets.
- Bangladesh experienced a 154% growth in hybrid car imports from FY18 to FY21.
- Automobile Industry Development Policy, 2021 has been formulated to ensure mass adoption of electric cars in Bangladesh by the year 2030.

It can be clearly assumed that the demand for electricity will keep rising in line with the growth of the electric vehicle market in Bangladesh. If this increased demand for electricity is met with the help of power plants that run on fossil fuels and coal, the benefits of the mass introduction of electric cars will eventually be cancelled out. To reap the true benefits of electric vehicles, it must be ensured that the electricity with which these vehicles will be powered is generated with renewable energy. There should also be a proper guideline for the disposal of the replaced batteries so that they do not pollute the environment. Only then the dream of zero carbon footprint can be achieved.

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EXPERT OPINION ON COVER STORY



Mustafa Al MominCo-Founder and CEO, Palki Motors

Interviewed by Akhlaqur Rahman Sachee, Team MBR

Mr. Mustafa Al Momin is the Co-Founder and CEO of Palki Motors. He is an electrical engineer who graduated from Montana State University, MT, USA. He has more than seven years of experience in electric vehicles, renewable energy, software product management, and entrepreneurship. He is a Grameenphone's GP Accelerator alumni and a graduate of Silicon Valley's Founder Institute. Team MBR was in a conversation with Mr. Mustafa Al Momin and was fortunate enough to receive his take on electric vehicles.

Akhlaqur Rahman Sachee: Market research says that the worldwide electric vehicle (EV) market is about to grow at a CAGR of 21.70% from around 8.15 million units in 2022 to around 39.21 million units in 2030. Would you kindly share with us the drivers that will fuel this projected growth?

Mustafa Al Momin: First of all, there are three different markets for EVs in Bangladesh. One market is the luxury passenger electric cars that Tesla and other high-end EV companies are making. Then there is a market for utility EVs like electric buses, microbuses, and other commercial passenger cars, and lastly, there are EVs that carry goods. Bangladesh has more than 2 million electric auto rickshaws and more than 4 million rickshaws. They carry passengers commercially. At Palki Motors Limited, we are focusing on commercial passenger cars and commercial pickup trucks. This market size is enormous in Bangladesh. The main growth drivers will be the rapid GDP growth of the country and the high price of fossil fuels. Electric cars cost only BDT 1.51 per KM, ensuring that one lithium iron phosphate battery runs for 100,000 KM before reducing its life to

80% capacity. This is the main attraction for commercial passenger car drivers and companies to buy pickups.

Akhlaqur Rahman Sachee: A significant increase in sales of hybrid vehicles has been observed in Bangladesh in recent years. Do you think that it is an indication of the potential prosperity of the EV market in the country?

Mustafa Al Momin: Most of the hybrid car owners are well off and belong to 1% of the population. I do not think buying more hybrid cars is an indicator of the potential prosperity of the EV market in Bangladesh. Instead, I believe more than 300,000 electric autorickshaws being sold in the country is the main indicator of prosperity. The person who buys a hybrid car does so for availability and to show off. Because second-hand car sellers see more profit from hybrids, they import more of them. Also, because Japan uses more hybrid cars, when they salvage their cars at dumpsters, second-hand car sellers buy them and bring them to Bangladesh to sell to the well-off Bangladeshi people. Japanese consumers are dumping more hybrid vehicles nowadays. That is why we have more hybrid cars on the street. So, this is not an indicator of prosperity for EVs.

Akhlaqur Rahman Sachee: Lack of EV-friendly infrastructure, e.g., lack of availability of EV charging stations, is supposed to hinder the growth of the EV market in Bangladesh. What infrastructural developments are required, in your opinion, to ensure the healthy growth of the EV market in Bangladesh?

Mustafa Al Momin: Lack of infrastructure is not just a problem. Rather, it is a chicken-or-egg problem. We do not have more EVs because there is no EV-friendly infrastructure, and we do not have EV-friendly infrastructure because there are very few EVs in the market.

Now, as I say, there is no EV in the market; the information is inaccurate. It might be true in layman's terms. But, as I have mentioned above, there are more than 2 million electric auto-rickshaws in the market.

So, we must ensure that those auto rickshaws use the latest battery charging technology. We can make a rule that those electric auto rickshaws must use lithium iron phosphate batteries, and they must be compatible with high-power superchargers. In that case, we get lots of superchargers in the market automatically. So, instead of thinking of the electric auto rickshaws as a disease in the EV market, we have to bring them under safety regulations and specifications. They will be major elements in building EV-friendly infrastructure. This way, we will have all the EV-friendly infrastructure required for the country to fulfil its dream of having fossil fuel car-free streets by 2050.

Akhlaqur Rahman Sachee: One of the reasons that Bangladeshi buyers are discouraged from purchasing hybrid or electric vehicles is the high cost of replacing batteries. What cost-effective solutions can the EV manufacturers offer to solve this issue?

Mustafa Al Momin: I do not think that only the high price of batteries is the primary reason for the discouragement of buying HEVs or EVs. The cost of the car itself is very high, too, due to excessive customs duties. The customs duties are high because the government wants the entrepreneurs to come forward and establish plants for local value addition.

I firmly believe that when companies like Rahimafrooz, Panna, and other lead acid battery manufacturers will come forward and manufacture the batteries required for HEVs or EVs, the price will drop, and people will be interested in buying more of them, as well as we need at least 5-6 companies like Palki Motors Limited that will make 100% made in Bangladesh cars so that this price is affordable.

Akhlaqur Rahman Sachee: There are misconceptions among buyers regarding the performance and reliability of EVs. What measures can the EV manufacturers take to address this concern?

Mustafa Al Momin: The misconceptions will be easily removed if the manufacturers first make the EVs and let the users drive for themselves. At Palki Motors Limited, we did precisely that. We built the EVs first and offered hundreds of test drives to genuine buyers. We took their feedback and improved the cars.

The electric auto rickshaws have already proven their performance. I am talking about electric auto rickshaws because this is our present, and we should not copy ideas from EV giants like Tesla because our geology is different, our people are different, and our GDP is distant from that of the USA or any other developed nation. We have to innovate, thinking about our people and our environment.

Akhlaqur Rahman Sachee: The National Board of Revenue (NBR) has proposed Advance Income Tax (AIT) structure for EVs in line with conventional vehicles, considering 20 CC equivalent to 1 KW. How encouraging is this tax structure, in your opinion, for buyers to switch to EVs? What else can be done to encourage buyers to go for EVs instead of conventional vehicles?

Mustafa Al Momin: First of all, why 20 CC = 1 KW? I am an electrical engineer myself. I understand business and electricity. The conversion does not make any sense to me. I tried to do many backward calculations to understand why that conversion happened. The CC stands for cubic centimetres, which is the unit of volume, and 1 KW or 1,000 watts, is a unit of electric

power. How can these two units be equivalent? The CC is the measurement of the combustion engine cylinder, and the watt is for electrical power. I tried to convert CC to joule, but again, different engines have different efficiencies, and we cannot convert all fuels to the same unit of joule. So, the unit conversion is wrong.

Through this interview, I am requesting BRTA change the measurement units from $20 \, \text{CC} = 1 \, \text{KW}$ to something related to horsepower or torque. Then, we will have a conversion ratio that makes sense.

After fixing the conversion error, I think BRTA or other authorities should look at Bangladesh's present perspective. We should reform laws to legalise lithium iron phosphatase-based electric easy bikes. They provide a livelihood to more than 1 crore people. After legalising them and ensuring proper safety features, speed regulations, and aerodynamics, we must focus on building charging stations for easy bikes. Then, the whole market scenario will change.

Electric easy bikes have been running in the country since 2016. It has been over five years already. If we had regulations and allowed electric auto rickshaws, the government could have earned billions of dollars in remittance from carbon trading. We still have time. Few other countries have this many electric vehicles running on the street.

I do not think we have to encourage customers to buy EVs. They are already super excited to buy them because of their low maintenance cost and mileage. The government just has to take the initiative to make the registration process easy. According to the Automobile Industry Development Policy, 2021, the government has already mentioned all of those I have mentioned. The government wants to develop a one-stop registration service centre for hybrid and electric cars. I urge the government to implement what is written in that gazetted plan. We, the local automobile manufacturers, can fulfil the government's plan to make Bangladesh the automobile manufacturing hub of the world.

Finally, the tax structure is not fair. According to that structure, the car with a less than 75 KW motor will have the same tax as the 1500 CC car. A 75 KW motor-powered car is way more powerful than a 1500 CC car. In

Bangladesh, most easy bikes run on 0.8 KW motors, and mini EVs like Palki's City Boy run on 3 KW to 10 KW motors. The smaller EVs with high-end batteries like lithium require less energy to run. So, the government should segregate the tax structure. The tax slabs should start from 3 KW.

And according to the Automobile Industry Development Policy, 2021, the government should charge tax only once every five years. The government should also give income tax rebates and all other supports to EV buyers, as mentioned in that plan.

Akhlaqur Rahman Sachee: The government has offered tax holidays for local EV manufacturers if locally sourced components are used to a certain extent. Is the policy support adequate for the local manufacturing of EVs to boom?

Mustafa Al Momin: Currently, there is no policy support at all. I have read the Automobile Industry Development Policy, 2021 thoroughly. The document is very high quality and complete. However, I do not see the execution of that beautiful plan. Startups like Palki Motors Limited, SOLshare, Green Tiger, ZigZag Car, and Fare Technologies can play a crucial role in that plan. These companies can build parts and an ecosystem for EV users and make the adaptation quick. I request policymakers to create an environment so that startups like ours can play a part in the EV story. I urge the BRTA to make the approval process easy for startups that ensure quality to become OEM vehicle and parts manufacturers.

Akhlaqur Rahman Sachee: As the founder of Palki Motors, the very first EV manufacturing startup, please share your thoughts regarding the response you are receiving from prospective buyers. Are you hopeful about the prospect of the EV market in Bangladesh? Lastly, is the dream of a zero carbon footprint achievable?

Mustafa Al Momin: I am very hopeful about the future of EVs in Bangladesh. As a proud Bangladeshi, I have a legacy of electric vehicles. I am pleased that Bangladesh has more than 2 million EVs running on

the streets today without any government support. That USD 2 billion industry flourished without any care from any authority. So, startups like Palki Motors Limited will flourish too.

Palki Motors Limited is producing mini electric cars to assist 1 million commercial passenger car drivers in Bangladesh who are struggling to make ends meet because they do not own the vehicles they drive. Hence, they have to pay 40% of their daily income to the owners.

We will provide the drivers access to affordable and locally manufactured vehicles that will enable them to make more money as they do not have to pay the rent every day.

Our vision is to improve the lives of drivers involved in the transportation sector while assisting the sector in reducing its carbon footprint. My main motivators are my customers. They constantly give us feedback, and we take the feedback very seriously. We are alive because the customers support us and cheer for us. Our customers build every atom of Palki Motors Limited. When they want something, we give them the highest priority. They have set up our marketing, our branding, and everything else.

The dream of zero carbon is possible. But the transportation sector contributes only 27% of emissions, and other industries emit the rest. I believe the transportation sector will become a carbon-free inevitability. The mileage is already way cheaper than fossil-fuel cars. We are just due to making high-quality, affordable vehicles. Renewable energy products are net-zero carbon products. If all the EVs are charged by renewable energy, I think that makes zero carbon true. However, that is not possible within a few years. We need the government, the EV manufacturers, and the EV buyers to work jointly towards the goal.



UNWRAPPING THE GROWTH POTENTIAL: HOW BANGLADESH IS WRITING ITS OWN TOY STORY

Written by **Tasnimul Hasan Ruhi**



EXCLUSIVE FEATURE

It is a rare sight to see children without some kind of toy when they are out and about. They grow an emotional connection with the inanimate object, which instils moments of joy while playing with it. But toys are more than just objects of amusement; they are important teaching tools that can shape the way a child develops and grows emotionally and intellectually. It gives children the opportunity to explore and express themselves, as well as develop their creativity and problem-solving skills. Bangladesh is home to a thriving toy industry which has been bringing smiles on children's faces since 1998. The vibrant and intricate toy designs are a reflection of the country's bright and lively culture. Almost 1.50 million workers are employed in more than 5,000 plastic companies spread across the country (UNB News, 2022). These plastic companies are the major manufacturers of toys which are available throughout the local shops and bazaars. The expected revenue of this industry was USD 157 million in 2022, which is a 16% increase over the previous year and a CAGR of 19.65% (Statista, 2022).



Market Scenario

The toy industry is a dynamic and everchanging sector of the consumer goods market. With an estimated value of USD

129.45 billion in 2020, it is one of the largest markets in the world (Fortune Business Insight, 2021). Disney, Hasbro, Mattel, and Lego are some of the prominent names in the toy industry. From classic wooden toys to the latest high-tech gadgets, they produce their toys based on pop culture events and idols. Through constant innovation, these companies have been able to keep up with changing consumer preferences, making them attractive brands for many children.

Bangladesh has contributed to this industry by offering highly affordable toys with quality comparable to the toy manufacturers of other countries. The toy manufacturing hub is located at Chawkbazar near Lalbagh Fort in Old Dhaka, where thousands of toys are produced and sold every day. It is home to more than 500 wholesale toy sellers. Through these shops, toys are distributed throughout the whole nation. These local toys are made mostly from plastics, while others are made from fabrics, paper and other materials.

85% market Local toys Α gain upper share for **BDT 7,000** hand over homecrore foreian grown market peers products exists currently Chawk Toys worth Market expected to Bazar, over **USD** be around biggest 36 million **BDT 10,000** toy business exported in hub FY 21 crore

Source: The Business Post

Growth Prospects

The growth of the toy industry is a natural phenomenon in a country like Bangladesh. According to UNICEF,

there are about 64 million children, and they comprise 40% of the total population (UNICEF, 2022). So, there is an ever-increasing demand for toys which are met by local producers and importers. Granted, all of them are not equally opportune to enjoy the imported toys, Bangladeshi industry is excelling at producing cheap alternatives of otherwise expensive products. Toys as cheap as BDT 10 are available in the local bazar, which gives even the underprivileged kids a chance to enjoy their childhood. This, in turn, pulls up the demand and supply of locally produced toys.

The toy industry in Bangladesh has seen remarkable growth in recent years, with an estimated market size of over USD 385.50 million by 2027 (Statista, 2022). In 2022, the demand from customers was around BDT 7,000 crore, and the local manufacturers matched a stunning BDT 4,000 crore of that total demand (The Business Post, 2022). Toys that were manufactured in Bangladesh have already been sent to both Europe and North America, where there is an ever-increasing demand for these products. Bangladeshi workers have been able to successfully combine traditional craftsmanship with modern manufacturing techniques. As a result, the toys produced in Bangladesh are of high quality, affordable, and highly sought after in both international and local markets. This has allowed the industry to expand and grow, providing numerous economic benefits to its workers and helping to stimulate the country's economy. "Bangladesh may become the world's 28th biggest exporter of toys if the present growth rate continues," said Md Jashim Uddin, President of the Federation of Bangladesh Chambers of Commerce and Industry (Business Inspection, 2022).

With the increasing demand, more and more toy companies are entering the market, which has helped us meet local demands and also have a surplus for exports. But this was not the scene even a decade ago, as most of the toys were imported from countries like China. Regarding this, Shamim Ahmed, president of the BPGMEA, said that approximately 90% of the toys in Bangladesh were imported ten years ago; now, barely 10% are imported (The Daily Star, 2022). He also added that this labour-intensive industry offers a huge

number of job opportunities and will undoubtedly play a crucial part in the future success of the country's exports.



Roadblocks

Even though the industry shows a promising future, there are some blockades which are hampering its

growth. Tackling these problems can give us an industry which can contribute substantially to our total export earnings.

Globally, the rise of the video game industry has diverted children's attention from toys which are making the future of the industry seem bleak. The market size of the global video game industry in 2021 was USD 195.65 billion, which is much higher than the global toy industry (Grand View Research, 2022). Because children can play any kind of game if they have access to a smartphone or computer, they prefer having the choices it offers. This also reduces the cost parents have to bear to entertain their kids. Even when parents want toys, they opt for educational toys rather than something which provides mindless entertainment.

The decreasing birth rate is also a major threat to the industry. Over the course of the last seven decades, fertility rates have dropped all over the globe by a combined total of fifty per cent (World Economic Forum, 2022). This is due to the high cost of raising children, women's empowerment in education and the workforce etc. With fewer children being born, there is less need for these products in the marketplace. This has caused a dampening of demand, leading to decreased growth and difficulty in staying competitive with other forms of entertainment.

On top of these, there are constant pressures from environmental activists about the raw material that are used for the production of toys. When exposed to high temperatures or other environmental conditions, these plastics can break down and release toxins into the air or water, posing a risk to both animals and humans. Most of the toys are made from hard plastic, which is not a bio-degradable component. The discarded toys can accumulate in landfills and in our oceans, posing a threat to both wildlife and the environment. Finally, some plastics used in toys contain hazardous chemicals that can be ingested by children, leading to potential health risks. All these concerns create legal issues which

put constraints on the use of plastics and increase the cost of production. This lowers the profit margin and makes it an uninviting industry for people to conduct business.

Toy producers are also suffering from the high cost of importing raw materials. According to Shahjahan Mazumder, president of Bangladesh Toy Merchants, Manufacturers and Importers Association, most of the raw materials and machinery are imported from China which forces them to put a high price tag on the toys. The factories also have to hire technicians from China which is really expensive for the businesses to bear. On top of these, lithium-ion batteries and rechargeable batteries are completely dependent on imports from other countries, which increases the overall price of the toys to a certain extent. But these crises can be averted if the raw materials and machinery are produced locally, and better training is provided to the Bangladeshi workers, which will bring the toy industry into the limelight.

Other than these, the toy industry of Bangladesh has some issues of its own. These include the impact of the pandemic, government tax on imports, availability of quality raw materials and many more.



Toys during Pandemic

With the advent of the pandemic, lockdowns were imposed all over the country, which disrupted the

production and sales of toys. People were focused on products which fulfilled their basic needs, so the thought of buying toys during that time was far-fetched.

This caused many entrepreneurs to shut down their businesses, and most of the businesses were forced to cut down on employees. This created a rippling effect, and the industry is still trying to turn around from the disaster.



Government Aid for the Toy Industry

Increasing import tariffs can make customers rely heavily on locally

produced toys by reducing their access to imported toys. As consumers become more price-sensitive, they will look for cheaper alternatives, which could lead them to favour locally produced toys that may be better quality or more cost-effective. Additionally, local producers will be incentivized to provide higher quality products at competitive prices, giving customers an incentive to choose locally produced toys. Withdrawing the 10% supplementary duty currently imposed on toy products will help the sector flourish. To further encourage domestic production, the import tariff on imported toys could be raised from USD 7.5 per kilogramme.

The toy industry of Bangladesh is booming as it has seen an increase in export opportunities and has developed a range of new products to meet the needs of the global market. The country has established a number of ecofriendly measures to ensure production is conducted sustainably, and there are great opportunities for both large and small producers to take advantage of the growth potential. With this in mind, it is clear that the toy industry of Bangladesh is heading in the right direction and is likely to remain profitable in the future.



EXPERT OPINION ON EXCLUSIVE FEATURE



Shahjahan MazumderFounder, Everest Toys Industries Limited
President, Bangladesh Toy Merchants, Manufacturers and
Importers Association

Interviewed By Tasnimul Hasan Ruhi, Team MBR

Mr. Shahjahan Mazumder is the founder of Everest Toys Industries Limited and the president of the Bangladesh Toy Merchants, Manufacturers and Importers Association (BTMMIA). He has been working in the toy industry since 1978 and has worked throughout his life for the development of the toy industry in Bangladesh. Team MBR was in a conversation with Mr. Shahjahan Mazumder and was fortunate enough to receive his take on the toy industry in Bangladesh.

Tasnimul Hasan Ruhi: During the period July 2021-April 2022, toy exports accounted for 29% of total plastic exports. Also, toy exports have experienced a cumulative average growth rate of 24%. What are the factors, in your opinion, contributing to this phenomenal growth in the toy industry?

Shahjahan Mazumder: The heart and soul effort of this sector's young entrepreneurs is a significant contributor to the industry's success. Their ambitions are in line with, if not ahead of, those of overseas toy producers. These young minds are sometimes working for 18 straight hours in their factory. I can mention several toy manufacturing entities that started their businesses from scratch. Most of them started with a mere capital of around BDT 5 lakh. However, now these businesses are worth crores. They achieved tremendous success owing to the large margins when they first started out, but this is no longer sustainable due to rising market rivalry.

Tasnimul Hasan Ruhi: Educational toys are becoming more popular among parents as an alternative to more conventional playthings.

How are toy manufacturers planning to grab the growing opportunities in this niche?

Shahjahan Mazumder: Most toy manufacturers look up to China, as they are the global leader in this sector. In the last few years, we have seen China shift its focus toward educational toys. However, it is more convenient for us to produce educational toys that are cheap and durable so that parents can easily replace or fix those without breaking the bank. Unfortunately, we have not been able to visit China recently to study their market physically due to the increased exchange rate and overall price of products in the Chinese market. However, we are planning to capture this niche, as adapting to consumer preferences will help us make the industry sustainable.

Tasnimul Hasan Ruhi: Manufacturing toys generate plastic waste, and burning them releases toxic gases. Would you kindly share the measures taken in the production process that address these sustainability concerns?

Shahjahan Mazumder: Yes, it is true that plastic is detrimental to the environment and our mother planet. Considering this fact, we try to use plastic toys made

from top-grade plastic granules, so they inherently produce fewer toxins. Also, we are more focused on recycling plastic, which is more cost-effective and environmentally friendly. Then again, the big factories have specialised production methods to reduce the amount of these toxic gases, which the small factories are unable to do. In collaboration with the government, we are trying to establish a separate toy manufacturing and sales zone that will be able to mitigate all these risks.

Tasnimul Hasan Ruhi: Toys made in Bangladesh have already made their way to both Europe and North America. What actions should exporters of toys take to ensure they maintain their competitive edge in those markets?

Shahjahan Mazumder: I have been working with toys since 1978, and now my life revolves around this industry. I have seen other developed countries making strides in this sector because they consider it an important contributor to their economies. I have received proposals from China and Hong Kong to establish their production plants in Bangladesh due to the availability of cheap labour. But to implement their investment plan, we need to first address the issue of the bureaucratic maze that deters investors from Bangladesh. Generally, to export toys to European countries, two safety certifications are required. They are EN 71 and ICTI. The machines and facility layouts in our country are not ISO certified. So, producing export-quality toys is still a distant dream for the majority of the industry participants. I am not personally connected with toy exporters from Bangladesh. But I can say that they are joint ventures with companies from Hong Kong, Vietnam, and other countries. They already have a foreign customer base, which the local toy producers lack.

Tasnimul Hasan Ruhi: The pandemic has caused a significant amount of damage to the toy sector. What methods have you put in place so that you may continue to make a profit in this sector?

Shahjahan Mazumder: The pandemic has taught us many things that have helped us turn around and

make a profit after those painstakingly dull months. The producers had no capital to buy raw materials, let alone pay the rent for production facilities and utilities. It has made many suppliers and producers leave the sector, which has put a dent in the industry. Now that things are back to normal, we're putting more effort into adapting to the changing market and using technology like e-commerce websites and social media to get more attention

Tasnimul Hasan Ruhi: 90% of the local demand for toys is being met by local manufacturers. Would you kindly share the roadblocks that the industry is facing to meet the entire demand?

Shahjahan Mazumder: One of the major roadblocks is the lack of skilled workers in our country. In countries like China and Taiwan, there are specialised training centres to train the workers in the toy sector, which our country lacks. In this regard, the government should invest in the training of workers in this sector so that they can return and contribute to the improvement of the sector.

Tasnimul Hasan Ruhi: A drop in sales has been observed due to inflationary pressure and the US dollar crisis, causing an interruption in imports of raw materials. How are toy manufacturers planning to address this issue?

Shahjahan Mazumder: As you know, inflation has been decreasing slowly but surely since it peaked in August 2022. We, the toy manufacturers, are purchasing raw materials at inflated prices, though in less quantity than before. But we have trust in our economy that the inflation will reduce further, returning to the previous state, making it easy for us to take this sector to new heights.

Tasnimul Hasan Ruhi: You are the founder of Everest Toys, and you are serving as the president of the Bangladesh Toy Merchants, Manufacturers, and Importers Association, both of which have given you a wealth of knowledge in this sector over the years. Throughout all these years, what difficulties

have you encountered that are specific to this industry?

Shahjahan Mazumder: The environment can make or break an industry. As elders, we are responsible for creating a better environment so that our successors can take over the industry and make it flourish more than before. We are expecting that the government will consider the toy manufacturing industry as

another priority industry, like the ready-made garment industry. I have been working in this industry for so long, and I have seen it grow over the years. If there had been a separate industrial zone for toys, which requires direct government initiative, this growth could have been accelerated. I hope the new minds will be able to bring about the change we could not and make toys one of the largest export sectors in Bangladesh.



IDLC Hands over the Prizes to the winners of "IDLC Kickstart 2.0 - Fantasy Football Challenge"



The "IDLC Kickstart 2.0 - Fantasy Football Challenge" winners were awarded in a recent ceremony held at Lakeshore Hotel Gulshan. M Jamal Uddin, CEO & Managing Director of IDLC along with other senior officials of IDLC, handed over the prizes to the winners.

The grand prize winner received four air tickets to Thailand for being the cumulative highest point earner throughout the campaign. Other winners won Android Television, Sony PlayStation 5, Nintendo Switch Gaming Console, and other exciting prizes.

IDLC Kickstart 2.0 - Fantasy Football Challenge was launched as a continuation of IDLC Kickstart during the 2018 Football World Cup. The sole purpose of the campaign was to teach money management and investment strategy through gamification, utilizing

the excitement of the football enthusiasts of the country for the Football World Cup 2022.

More than 1 lac football enthusiasts played this strategic game during World Cup month from the website, Android & iOS apps.

M Jamal Uddin, CEO & Managing Director of IDLC, said, "IDLC has always been active in inspiring the youth to learn about investing, saving and knowing how to manage their money. Kickstart is one of our initiatives that has been welcomed by the youth. They enjoyed the game, and they have learned to use their capital carefully to earn rewards. That's what this campaign was all about!"

He thanked all the participants and the employees who helped make this campaign a success for their participation and engagement.

Agreement Signed between IDLC Finance and Delivery Tiger



IDLC Finance Limited signed an agreement with Delivery Tiger on January 1, 2023, to provide small ticket loans to the merchants on Delivery Tiger's platform. Through this partnership, IDLC Finance will facilitate digital lending for the cottage, micro, small, and medium enterprises (CMSMEs) on Delivery Tiger's platform. Mr. Syed Javed Noor, Deputy Managing Director of IDLC Finance Limited, and Mr.

Fahim Mashroor, CEO of Delivery Tiger, signed the agreement at IDLC's head office in Dhaka.

Delivery Tiger is committed to serving the needs of small, online-based entrepreneurs who are growing their businesses. This partnership can play a pivotal role in developing these CMSMEs through Delivery Tiger's platform.

Easy Life for Bangladesh



Mossammat Beauty Begum

Founder, Easy Life for Bangladesh

Interviewed by Tasnimul Hasan Ruhi, Team MBR

Mossammat Beauty Begum is the founder of Easy Life for Bangladesh, which specialises in rehabilitating amputees by fitting modern prosthetics. She has completed her diploma from the Christian Medical College of Vellore, India, in orthotics and prosthetics. She specialises in multi-disciplinary prosthetics covering the upper and lower limbs. She plans to revolutionise the prosthetic industry in Bangladesh and help all amputees live healthy and normal life. Team MBR was in a conversation with Mossammat Beuaty Begum to learn about her inspirations and vision behind Easy Life for Bangladesh.

Tasnimul Hasan Ruhi: You are working on rehabilitating people with physical disabilities by providing assistive devices, artificial limbs, mobility, developmental, and rehabilitation aids. What were your motivations for getting involved in this project?

Mossammat Beauty Begum: When I was working at BRAC, one of my patients asked me to fit

a prosthetic limb for him. Because he was so happy with the prosthetic attachment, he showered me with blessings. This incident inspired me to start the journey. That is when the idea struck me that I should establish a centre for disabled people that provides rehabilitation services. Tasnimul Hasan Ruhi: You have received your training in Vellore, India, and have physicians who have completed their advanced training in this sector. Do you think the industry in Bangladesh has progressed enough compared to our neighbouring country?

Mossammat Beauty Begum: This sector has not provided us with many opportunities for

advancement, and there are numerous challenges that we must overcome. For instance, there is no sponsorship from notable businesses and organisations. In terms of academics, there has never been a diploma programme that specialises in this field. There are

also complications associated with the import of raw

materials, and in many circumstances, a significant amount of tax must be paid for imports.

Tasnimul Hasan Ruhi: Speaking of problems, new opportunities and innovations always help to ease the problems in the industry. Would you please share how you can implement new opportunities and innovations in the industry?

Mossammat Beauty Begum: Because our nation does not have a large pool of experts with the appropriate training in this industry. Therefore, we are taking the initiative to launch our new branches by providing training from our head office. We are also attempting to lessen our reliance on imported raw materials by employing resins that are produced locally in Bangladesh in order to provide indigent patients with access to this service at a reduced cost.

Tasnimul Hasan Ruhi: Quality control is an essential part of any product development process, as it helps ensure that the product meets or exceeds expectations and guarantees safety and reliability to the users. May we know how you ensure quality control in the prosthetics you produce?

Mossammat Beauty Begum: Because I have such compassion for these individuals who are missing limbs, we do not make any concessions when it comes to the quality control of our products or services here. We assure the quality of the devices at every stage, from deciding which device a patient needs to have moulded and delivered. We follow this process in order to ensure that the patient derives the utmost possible benefit from the use of this gadget.

Tasnimul Hasan Ruhi: To gain success in an industry, having a comprehensive understanding of the needs and capabilities of its target market is essential. Which do you believe are the most important components of success in the Bangladeshi prosthetics industry?

Mossammat Beauty Begum: The mentality to provide quality service is, in my opinion, the most significant aspect of all of them. Simply because I believe that the words of ordinary people have far less

of an impact on a patient's motivation than the words of an experienced user.

Tasnimul Hasan Ruhi: Throughout your journey, you have helped so many people come back to a normal life. Would you kindly share a story that made you proud of your work?

Mossammat Beauty Begum: In a car accident, a sixty-year-old man had to have an arm and a leg amputated. He took a prosthetic leg from me a long time ago. I have asked him several times to come and take an artificial hand. But he used to argue that he already had one hand; what would he do with the other? After a few days, he came into my office and said, "Mother, make me an artificial hand." I asked him why he had changed his mind. He informed me, weeping, that his grandson is little, that he is afraid to come to me, but that he would come if he had both hands. I provided him with a lovely prosthetic hand, and when he got home two days later, he informed me that "My grandchild is now in my arms." This makes me very proud.

Tasnimul Hasan Ruhi: Women generally face many challenges while starting out their businesses, some of them rooted in social stigma and others in cultural dogmatism. Would you care to share some of the challenges you faced as a woman working in this sector?

Mossammat Beauty Begum: It is true that I have been forced to put up with a lot of criticism because I am a woman. But my spouse never failed to inspire me or give me the strength I needed. I am thankful to have his help.

Tasnimul Hasan Ruhi: Many aspiring women are working tirelessly to establish their own businesses. What advice would you give to them so that they can follow in your footsteps and avoid the challenges that lie ahead of them?

Mossammat Beauty Begum: I still feel that I do not have the necessary credentials to give them advice. But I would say if you do your task with integrity and do not give up, success will find you in due time, In sha Allah.

Performance of Equity Markets of Bangladesh and Peer Countries

Bangladesh equity market closed the month of December in negative territory. During the month, the broad index DSEX went down by 0.5%, closing the year 2022 with a return of -8.1%. Blue chip index DS30 and Shariah index DSES fell by 0.9% and 0.8%, respectively in the month of December. These indices yielded -13.3% and 5.1% return, respectively in 2022.

Among the regional peers, Sri Lanka reported the lowest negative return of 1.7% followed by Vietnam (-3.9%) and Pakistan (-4.6%). During the year 2022, Pakistan posted 9.4% negative return followed by Sri Lanka (-30.5%) and Vietnam (-32.8%). MSCI Frontier Markets Index performance was negative by 3.5% in December. Over 5-year horizon, Sri Lanka (+33.5%) booked the most encouraging return.

Table 1: Equity market performance of Bangladesh and peer countries

| Indices | Index Points, | | Return* | | | | | | |
|-----------------------------|---------------|-------|---------|--------|--------|--------|--|--|--|
| muices | December 2022 | 1M | 3М | 12M | 3Y | 5Y | | | |
| Bangladesh | ' | | | | | | | | |
| DSEX | 6,206.8 | -0.5% | -4.7% | -8.1% | 39.4% | -0.6% | | | |
| DS30 | 2,195.3 | -0.9% | -5.8% | -13.3% | 45.1% | -3.9% | | | |
| DSES | 1,358.8 | -0.8% | -4.3% | -5.1% | 35.9% | N/A | | | |
| Peer Countries | | | | | | • | | | |
| Pakistan (KSE 100) | 40,420.5 | -4.6% | -1.7% | -9.4% | -0.8% | -0.1% | | | |
| Sri Lanka (CSE - All Share) | 8,502.5 | -1.7% | -14.4% | -30.5% | 38.7% | 33.5% | | | |
| Vietnam (VNI) | 1,007.1 | -3.9% | -11.0% | -32.8% | 4.8% | 2.3% | | | |
| MSCI Frontier Markets Index | 673.3 | -3.5% | -3.3% | -24.4% | -12.2% | -17.9% | | | |

^{*}All returns are Holding Period Return

Source: Investing.com, MSCI, DSE

Liquidity Condition in Equity Market of Bangladesh

During December, the total market capitalization decreased by 0.4%. The daily average turnover of December was BDT 3.6 bn (USD 34.0 mn), decreasing by 51.3% from that of the last month. Turnover velocity which represents overall liquidity of the market stood at 11.4% in December compared to 25.6% of last month. In 2022, turnover velocity of Bangladesh equity market was 30.7%, in comparison to 65.3% in 2021.

Table 2: Market capitalization and turnover statistics

| Particulars | 31-Dec-22 | 30-Nov-22 | % change |
|---|-----------|-----------|----------|
| Total market capitalization (USD* mn) | 71,618 | 71,929 | -0.4% |
| Total equity market capitalization (USD mn) | 41,381 | 41,484 | -0.2% |
| Total free float market capitalization (USD mn) | 16,092 | 16,154 | -0.4% |
| Daily Avg. Turnover (USD mn) | 34.0 | 69.8 | -51.3% |
| Turnover Velocity~ | 11.4% | 25.6% | N/A |

 $^{^*\!}$ All USD figures are converted using an exchange rate of 106.25 as of January 05, 2023 as per Bangladesh Bank website.

 $[\]sim$ Turnover velocity is calculated by dividing monthly total turnover with monthend market capitalization. The figures are annualized.

Historical Index Points and Market Participation Data

Since its inception on January 27, 2013, DSEX yielded a holding period return of 53.0% till December, 2022. During this period, daily average turnover of the market amounted to BDT 6.9 bn (USD 64.6 mn) (Figure 1).

Figure 1: DSEX since inception along with market turnover



Source: DSE

Market Valuation Level - P/E Ratio

The market P/E decreased to 14.51x in November compared to last month's 14.72x. It is slightly lower than the 22 years' median market P/E of 15.08x (Figure 2). In terms of trailing 12 month P/E ratio, the equity market of Bangladesh is the cheapest among its regional peers after Vietnam. (Figure 3).

Figure 2: Historical market P/E* and it's median

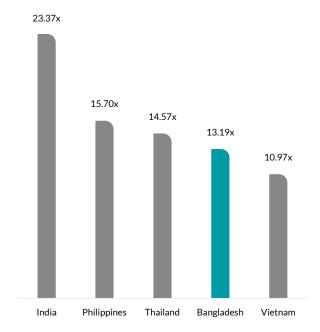
Current Market P/E* in Context of History



*Price Earnings (P/E) Ratio is calculated by dividing total market capitalization of all profit making listed companies with their total audited annual earnings.

Source: CEIC, DSE

Figure 3: Current market P/E* of Bangladesh and peer countries



*Trailing 12 month P/E as of January 05, 2022.

Source: IDLC, Bloomberg

Sector Performance

Large cap sectors posted mixed performance in December 2022. Textile posted the highest positive return of 0.8% followed by Food & Allied (+0.3%), whereas Telecommunication remained flat. Conversely, Miscellaneous reported negative return of 0.1% followed by Banks (-0.2%), Fuel & Power (-0.3%), Pharmaceuticals (-0.5%) and Engineering (-0.5%).

All the major sectors closed the year of 2022 in negative territory except Textile (+4.0%) and Pharmaceuticals (+1.6%). On the other hand, Telecommunication (-14.1%) posted the highest negative return, followed by Food & Allied (-12.8%), Miscellaneous (-12.3%), Engineering (-6.6%), Bank (-6.5%) and Fuel & Power (-1.5%).

Telecommunication sector has the highest dividend yield of 6.1% among all sectors.



Table 3: Sector performance snapshot

| Sector | | pitalization D mn) | | | Return* | P/E (x)** | P/BV (x)^ | Dividend Yield~ | | |
|-----------------------------|--------|-----------------------|-------|--------|---------|-----------|-----------|--------------------|------|-------|
| | Total | Free Float | 1M | 3M | 12M | 3Y | 5Y | | | Ticid |
| Pharmaceuticals & Chemicals | 6,872 | 3,701 | -0.5% | -3.4% | 1.6% | 67.0% | 47.1% | 15.7 | 3.2 | 2.4% |
| Bank | 6,282 | 3,402 | -0.2% | -1.1% | -6.5% | 32.9% | -0.5% | 6.5 | 0.7 | 3.9% |
| Telecommunication | 5,461 | 601 | 0.0% | 0.0% | -14.1% | 28.5% | -11.7% | 15.0 | 6.0 | 6.1% |
| Engineering | 4,972 | 1,073 | -0.5% | -2.9% | -6.6% | 95.0% | 32.4% | (7.9) | 2.5 | 1.7% |
| Fuel & Power | 4,203 | 1,208 | -0.3% | -0.5% | -1.5% | 23.5% | 27.8% | 11.7 | 1.4 | 5.0% |
| Food & Allied | 3,628 | 1,138 | 0.3% | -0.3% | -12.8% | 70.6% | 52.8% | 17.8 | 8.7 | 1.8% |
| Miscellaneous | 2,159 | 908 | -0.1% | -6.6% | -12.3% | 123.2% | 136.1% | 11.5 | 2.5 | 2.2% |
| NBFI | 1,775 | 580 | 0.9% | -4.4% | -16.6% | 32.8% | -19.1% | 29.7 | 2.0 | 1.7% |
| Textile | 1,606 | 921 | 0.8% | -4.2% | 4.0% | 45.3% | 13.2% | 17.1 | 1.1 | 2.4% |
| Cement | 1,049 | 414 | 0.3% | -9.3% | -11.0% | 66.4% | -15.0% | 17.7 | 2.9 | 0.5% |
| Non-life Insurance | 877 | 498 | -1.0% | -1.3% | -33.6% | 76.6% | 123.1% | 15.5 | 1.8 | 3.1% |
| Life Insurance | 651 | 382 | -0.7% | -8.8% | -12.3% | 8.7% | 34.8% | 98.2 | 7.1 | 1.9% |
| Tannery | 307 | 164 | -0.9% | -5.3% | -5.5% | 56.4% | 13.7% | 23.7 | 2.9 | 1.8% |
| IT | 366 | 225 | -4.3% | 8.6% | 29.2% | 80.7% | 69.6% | 24.5 | 3.1 | 1.2% |
| Ceramics | 307 | 122 | 1.0% | -5.4% | 6.5% | 52.5% | 20.5% | 38.0 | 2.1 | 2.0% |
| Travel & Leisure | 407 | 214 | -1.5% | -1.7% | 63.6% | 102.9% | 79.0% | 32.3 | 1.5 | 1.1% |
| Paper & Printing | 317 | 113 | -3.7% | -9.2% | -7.4% | 124.7% | 0.8% | 30.1 | 2.4 | 0.8% |
| Services & Real Estate | 255 | 132 | -3.0% | -17.5% | 15.3% | 105.0% | 29.4% | 20.5 | 1.5 | 3.4% |
| Jute | 34 | 18 | 19.3% | 40.3% | 74.9% | 39.4% | 80.8% | 239.7 | 10.7 | 0.0% |
| Market | 41,381 | 16,092 | -0.5% | -4.7% | -8.1% | 39.4% | -0.6% | 13.6 | 1.8 | 3.2% |

Cap Class Performance

During the month of December, all cap classes showed mixed performance. Large cap class faced the highest correction of 0.3% followed by Small class (-0.1%), whereas Mid class posted the highest return of 0.2% followed by Micro class (+0.1%).

All the cap classes yielded negative return in 2022 except Mid Cap (+4.2%). Large Cap was the highest dividend yielding (4.1%) class.

Table 4: Performance of different market cap classes

| Cap Class | Definition based on market | % of total equity | Return* | | | | P/E (x) | P/BV(x) | Dividend | |
|-----------|-------------------------------|-------------------|---------|-------|-------|--------|---------|---------|----------|-------|
| Cap Class | capitalization (USD mn) | Мсар | 1M | зМ | 12M | 3Y | 5Y | 1/E(x) | 1/57 (x) | Yield |
| Large | ≥96 | 77.3% | -0.3% | -1.6% | -8.8% | 75.2% | 44.1% | 11.6 | 1.6 | 4.1% |
| Mid | 29-95 | 11.9% | 0.2% | -6.1% | 4.2% | -20.1% | -40.0% | 8.3 | 1.5 | 2.3% |
| Small | 9-28 | 8.0% | -0.1% | -5.2% | -6.0% | 95.0% | 50.5% | 23.3 | 1.1 | 2.8% |
| Micro | <9 | 2.7% | 0.1% | -3.3% | -3.9% | -79.1% | -85.9% | 37.5 | 0.8 | 2.7% |
| Market | - | 100.0% | -0.5% | -4.7% | -8.1% | 39.4% | -0.6% | 13.6 | 1.8 | 3.2% |

^{*}All returns are Holding Period Return

Performance of 20 Largest Listed Companies in Bangladesh

Among the 20 largest listed companies in terms of market capitalization, POWERGRID (+1.9%) advanced the most, followed by ISLAMIBANK (+0.9%) and ICB (+0.5%). GP, WALTONHIL, BATBC, SQURPHARMA, ROBI, RENATA, UPGDCL, BEXIMCO, MARICO, BRACBANK, DUTCHBANGL, TITASGAS and SUMITPOWER remained flat due to their fixed floor prices. On the other hand, BXPHARMA (-5.7%) faced the highest correction.

Most of these companies yielded negative return in 2022 except for BEACONPHAR (+18.2%), TITASGAS (+15.4%), MARICO (+8.8%), ISLAMIBANK (+3.1%), SQURPHARMA (+2.6%) and RENATA (0.3%). ICB posted the highest negative return of 25.4% followed by BXPHARMA (-24.1%), BRACBANK (-24.0%), BEXIMCO (-20.1%) and GP (-15.0%)

Majority of these companies yielded outstanding return over longer time horizon (5 years) such as BEACONPHAR (+1336.0%), BEXIMCO (+407.3%), MARICO (+173.8%), UPGDCL (+123.3%), RENATA (+85.3%) and BERGERPBL (+81.5%)

Among the scripts, GP, UPGDCL, SUMITPOWER, SQURPHARMA and MARICO recorded higher dividend yield compared to that of market.

^{**}Price Earnings (P/E) Ratio is calculated by dividing total market capitalization of all profit making listed companies with their annualized earnings.

^P/BV is calculated by dividing total market capitalization of listed companies with their respective total book values, excluding companies with negative book values.

[~]Dividend yield is calculated by dividing last year's declared cash dividend with market capitalization.

Table 5: Snapshot of 20 largest companies in terms of market capitalization

| DSE Code | Sector | | Market Capitalization (USD mn) | | Return* | | | P/E (x) | P/ BV (X) | Dividend Yield | | |
|------------|--------------------------------|-----------------|-----------------------------------|----------|---------|--------|--------|---------|-----------|-------------------|------|------|
| | | Total | Free Float | (USD mn) | 1M | зМ | 12M | 3Y | 5Y | | | Heid |
| GP | Telecommuni- cation | 3,642 | 364 | 3,642.32 | 0.0% | 0.0% | -15.0% | 14.5% | -21.8% | 11.0 | 13.3 | 8.7% |
| WALTONHIL^ | Engineering | 2,987 | 30 | 2,987.09 | 0.0% | 0.0% | -7.5% | N/A | N/A | (172.3) | 4.0 | 1.4% |
| BATBC | Food & Allied | 2,636 | 697 | 2,636.22 | 0.0% | 0.0% | -14.6% | 80.8% | 57.9% | 15.9 | 8.5 | 1.9% |
| SQURPHARMA | Pharmaceuticals & Chemicals | 1,750 | 1,144 | 1,750.38 | 0.0% | 4.8% | 2.6% | 27.4% | -5.5% | 8.5 | 2.6 | 4.8% |
| ROBI^ | Telecommuni- cation | 1,479 | 148 | 1,478.95 | 0.0% | 0.0% | -13.0% | N/A | N/A | 204.5 | 2.6 | 0.7% |
| RENATA | Pharmaceuticals & Chemicals | 1,407 | 685 | 1,406.75 | 0.0% | 1.0% | 0.3% | 48.1% | 85.3% | 26.2 | 7.6 | 1.1% |
| UPGDCL | Fuel & Power | 1,275 | 128 | 1,275.06 | 0.0% | -0.7% | -4.3% | 16.3% | 123.3% | 11.7 | 5.1 | 7.3% |
| BEXIMCO | Miscellaneous | 953 | 630 | 953.43 | 0.0% | -11.0% | -20.1% | 795.4% | 407.3% | 7.5 | 1.7 | 2.6% |
| BERGERPBL | Miscellaneous | 75 ² | 38 | 749.76 | -0.3% | -1.0% | -0.8% | 32.4% | 81.5% | 29.3 | 11.0 | 2.3% |
| MARICO | Pharmaceuticals & Chemicals | 718 | 72 | 717.90 | 0.0% | -0.4% | 8.8% | 62.6% | 173.8% | 19.1 | 41.4 | 3.3% |
| LHBL | Cement | 708 | 254 | 712.29 | -1.8% | -13.9% | -5.8% | 108.8% | 3.5% | 17.1 | 4.8 | 0.0% |
| ICB | NBFI | 698 | 24 | 697.60 | 0.5% | -2.7% | -25.4% | 28.3% | -27.1% | 88.4 | 7.8 | 0.5% |
| BEACONPHAR | Pharmaceuticals & Chemicals | 622 | 435 | 634.56 | -5.5% | -8.8% | 18.2% | 546.5% | 1336.0% | 72.2 | 22.4 | 0.6% |
| BXPHARMA | Pharmaceuticals & Chemicals | 614 | 429 | 621.41 | -5.7% | -14.1% | -24.1% | 137.7% | 63.4% | 11.3 | 2.1 | 2.4% |
| BRACBANK | Bank | 542 | 292 | 542.29 | 0.0% | 0.0% | -24.0% | -13.3% | -34.3% | 11.4 | 1.5 | 1.8% |
| ISLAMIBANK | Bank | 500 | 225 | 497.39 | 0.9% | 0.3% | 3.1% | 87.3% | 5.9% | 9.1 | 0.9 | 3.0% |
| DUTCHBANGL | Bank | 410 | 53 | 409.92 | 0.0% | -1.1% | -9.8% | 30.5% | 55.8% | 8.2 | 1.6 | 2.5% |
| TITASGAS | Fuel & Power | 381 | 95 | 380.79 | 0.0% | 2.4% | 15.4% | 53.7% | 22.7% | 31.0 | 0.6 | 2.4% |
| POWERGRID | Fuel & Power | 352 | 88 | 351.50 | 1.9% | 0.8% | -10.4% | 29.1% | 19.0% | 9.0 | 0.7 | 1.9% |
| SUMITPOWER | Fuel & Power | 342 | 126 | 341.72 | 0.0% | 5.9% | -7.5% | 12.0% | 32.4% | 10.5 | 1.1 | 5.9% |
| Market | | 41,381 | 16,092 | 34.03 | -0.5% | -4.7% | -8.1% | 39.4% | -0.6% | 13.6 | 1.8 | 3.2% |

^{*}All returns are Holding Period Return.

 $^{^{\}wedge} WALTONHIL\ got\ listed\ on\ December\ 23,\ 2020.\ ROBI\ got\ listed\ on\ February\ 24,\ 2020.$

Top Performing Mutual Funds

The top ten open end mutual funds based on 5Y year CAGR outperformed the market, during the same period. Among them, CAPM unit Fund (+14.8%) yielded the highest return. In 2022, all these funds outperformed compared to market except Peninsula AMCL BDBL Unit Fund One and Fourth ICB Unit Fund.

Table 6: Top ten open end funds based on 5Y return (CAGR) performance

| None | Asset Management | Fund Size | | NAV Return | | | | |
|-------------------------------------|------------------|-----------|-------|------------|-----------|--|--|--|
| Name | Company | (USD mn) | 2022 | 2021 | 2017-2021 | | | |
| CAPM Unit Fund | CAPM | 1.4 | -2.8% | 29.6% | 14.8% | | | |
| Seventh ICB Unit Fund | ICB | 4.0 | -3.6% | 34.2% | 14.3% | | | |
| Second ICB Unit Fund | ICB | 2.2 | -1.6% | 41.5% | 14.2% | | | |
| UFS-Pragati Life Unit Fund** | UFS | 0.8 | N/A | 27.3% | 13.3% | | | |
| Peninsula AMCL BDBL Unit Fund One | IDLC | 2.2 | -8.6% | 25.7% | 11.8% | | | |
| Sixth ICB Unit Fund | ICB | 2.7 | -1.5% | 29.6% | 11.6% | | | |
| Third ICB Unit Fund | VIPB | 3.1 | -4.3% | 26.0% | 11.6% | | | |
| Fourth ICB Unit Fund | ICB | 1.9 | -8.1% | 36.1% | 11.4% | | | |
| LankaBangla 1st Balanced Unit Fund | ATC | 4.2 | -3.9% | 21.9% | 11.2% | | | |
| ICB AMCL Pension Holders' Unit Fund | ICB | 4.1 | -2.7% | 27.5% | 10.7% | | | |
| Market (Broad Index) Return (%) | | | -8.1% | 25.1% | 6.1% | | | |

^{*}Based on published NAV and DSEX point of December 29, 2022

All the top ten closed end mutual funds on the basis of 5 years (2017-2021) outperformed the market during the same horizon. Among them PRIME1ICBA (+12.4%) posted the highest return. In 2022, CAPMBDBLMF (+5.8%) and ICBEPMF1S1 (+0.7%) were the top performers.

Table 7: Top ten close end funds based on 5Y return (CAGR) performance

| DSE Code | Fund | Fund Size | Price ¹ | NAV ¹ | Price/ | Dividend | | | | | Redemption |
|------------|---------|-----------|--------------------|------------------|--------|------------------------|-------|-------|---------------|---------|-------------------|
| DSE Code | Manager | (USD mn) | (BDT) | (BDT) | NAV | Yield ² (%) | 2022 | 2021 | 2019- 2021 | 2017-21 | Year ⁴ |
| PRIME1ICBA | 965.0 | 9.1 | 7.7 | 9.7 | 79.8% | 6.5% | -2.4% | 35.8% | 17.3% | 12.4% | 2030 |
| 1STPRIMFMF | 283.2 | 2.7 | 17.0 | 14.2 | 120.1% | 5.9% | 0.5% | 38.5% | 17.3% | 12.0% | 2029 |
| ICBSONALI1 | 984.0 | 9.3 | 7.8 | 9.8 | 79.3% | 6.4% | -1.3% | 26.6% | 13.7% | 10.9% | 2023 |
| PF1STMF | 551.4 | 5.2 | 10.6 | 9.2 | 115.3% | 4.7% | -4.2% | 39.6% | 16.9% | 10.9% | 2030 |
| ICBEPMF1S1 | 693.8 | 6.5 | 7.1 | 9.3 | 76.8% | 7.0% | 0.7% | 38.2% | 17.7% | 10.6% | 2030 |
| ICBAMCL2ND | 501.0 | 4.7 | 8.7 | 10.0 | 86.8% | 6.9% | -1.1% | 36.2% | 16.1% | 10.5% | 2029 |
| ICB3RDNRB | 894.0 | 8.4 | 6.5 | 8.9 | 72.7% | 7.7% | -1.4% | 36.2% | 16.8% | 10.4% | 2030 |
| GRAMEENS2 | 3,423.6 | 32.2 | 15.2 | 18.8 | 81.0% | 9.9% | -2.6% | 18.2% | 9.2% | 9.8% | 2028 |
| CAPMBDBLMF | 612.1 | 5.8 | 10.1 | 12.2 | 82.7% | 7.9% | 5.8% | 29.9% | 12.4% | 9.3% | 2027 |
| RELIANCE1 | 813.1 | 7.7 | 10.8 | 13.4 | 80.4% | 9.3% | 0.0% | 19.2% | 8.7% | 9.0% | 2031 |
| Market | | | | - | | - | -5.6% | 25.1% | 7.9% | 6.1% | |

¹ Price as on January 01, 2023 and index value as on December 29, 2022.

^{**}UFS-Pragati Life Unit Fund NAV is not available due to book closing.

² On last cash dividend declared.

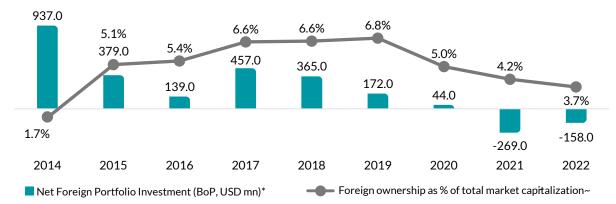
³ CAGR computed for respected periods, except for 2021 and 2022 YTD, adjusted for dividend. YTD returns of funds debuting within the year represent return generated since debut, hence is not directly comparable with return of funds that operated throughout the year.

⁴ In reference to BSEC Press Release বিএসইবস্মুখপাৱ (৩য় খন্ত)/২০১১/২৫ published on March 16, 2018, tenure of existing listed closed end mutual funds can be extended by another tenure equal to maximum 10 years, provided that the full tenure of the subject fund does not exceed 20 years in total. However, the mutual funds those are not willing to extend their tenure will still have the option to convert or wind up as per rules and regulations.

Foreign Participation in Equity Market of Bangladesh

Over last 5 years, Bangladesh equity market has seen a fall of foreign investment. As of November 2022, total foreign ownership stood at 3.7% of the total equity market capitalization, which was only 1.7% in December 2014.

Figure 4: Net foreign portfolio investment and foreign ownership as % of total equity market capitalization



Source: DSE and Bangladesh Bank

Among all the companies with foreign ownership, BRACBANK had the highest foreign shareholding of 34.0% as of November 2022, followed by BXPHARMA with 29.2%.

Table 8: Top ten companies with highest foreign shareholding as of October 2022

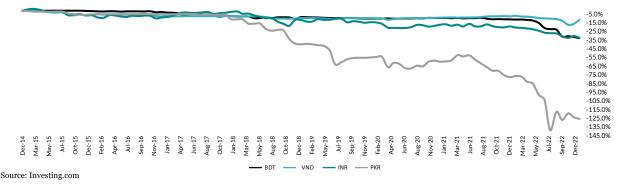
| Ticker | Sector | Foreign Shareholding* |
|------------|-----------------------------|-----------------------|
| BRACBANK | Bank | 34.0% |
| BXPHARMA | Pharmaceuticals & Chemicals | 29.2% |
| NAVANAPHAR | Pharmaceuticals & Chemicals | 27.7% |
| RENATA | Pharmaceuticals & Chemicals | 22.8% |
| OLYMPIC | Food & Allied | 20.8% |
| ISLAMIBANK | Bank | 20.6% |
| DBH | NBFI | 18.2% |
| BSRMLTD | Engineering | 17.5% |
| SQURPHARMA | Pharmaceuticals & Chemicals | 13.5% |
| SHEPHERD | Textile | 9.5% |

Source: DSE

Performance of BDT and Currencies of Peer Countries against USD

Since 2015, BDT retained its value better than majority of the currencies of peer countries. While BDT depreciated by 31.5% against US Dollar, other currencies of neighbor countries like Vietnamese Dong (VND), Indian Rupee (INR) and Pakistani Rupee (PKR) lost 10.4%, 31.2% and 124.6%, respectively.

Figure 5: Five year's relative performance of BDT and peer currencies



^{~%} of foreign ownership of equity market capitalization data are as of December of the respective years except 2022. 2022 foreign ownership % is as of October 2022.







এখন যেকোনো প্রয়োজনে

টাকা জমবে, বাড়বে নিরাপদে

বিকাশ অ্যাপ থেকে আইডিএলসি-তে

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