



Mathematical Development Schemes (MDS) in the garden

Mohammad Abdur Razaque

ABSTRACT

The paper examines the impact of the Mathematical Development Schemes (MDS) on the economic growth of Bangladesh. The study uses the data from 1980 to 2020. The results show that the MDS has a positive and significant impact on the economic growth of Bangladesh. The impact is more pronounced in the short run than in the long run. The study also finds that the MDS has a positive impact on the human capital formation and the technological progress. The study concludes that the MDS is an effective policy instrument for promoting economic growth in Bangladesh. The study also suggests that the government should continue to support the MDS and should also focus on improving the quality of the MDS.

JEL Classification: (E24, O53, O54, O55, O56, O57)

* The author is grateful to the Department of Economic and Social Affairs, United Nations, for providing the facilities for the research. The author is also grateful to the anonymous referees for their valuable comments and suggestions. The author is also grateful to the participants at the 10th International Conference on Economic Growth and Development, Dhaka, Bangladesh, 2023, for their valuable comments and suggestions. The author is also grateful to the participants at the 10th International Conference on Economic Growth and Development, Dhaka, Bangladesh, 2023, for their valuable comments and suggestions.

Mathematical

closed

I

the same

east

I b)

Let $f: \mathbb{R}^n \rightarrow \mathbb{R}^m$ be a function. Let $S \subseteq \mathbb{R}^n$ and $T \subseteq \mathbb{R}^m$.

(a) $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$ implies $f(S) = T$ and $f^{-1}(T) = S$.

(b) $f(S) = T$ and $f^{-1}(T) = S$ implies $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$.

(c) $f(S) \subseteq T$ and $f^{-1}(T) = S$ implies $f(S) = T$ and $f^{-1}(T) = S$.

(d) $f(S) = T$ and $f^{-1}(T) \subseteq S$ implies $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$.

(e) $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$ implies $f(S) = T$ and $f^{-1}(T) = S$.

(f) $f(S) = T$ and $f^{-1}(T) \subseteq S$ implies $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$.

(g) $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$ implies $f(S) = T$ and $f^{-1}(T) = S$.

(h) $f(S) = T$ and $f^{-1}(T) \subseteq S$ implies $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$.

(i) $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$ implies $f(S) = T$ and $f^{-1}(T) = S$.

(j) $f(S) = T$ and $f^{-1}(T) \subseteq S$ implies $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$.

(k) $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$ implies $f(S) = T$ and $f^{-1}(T) = S$.

(l) $f(S) = T$ and $f^{-1}(T) \subseteq S$ implies $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$.

(m) $f(S) \subseteq T$ and $f^{-1}(T) \subseteq S$ implies $f(S) = T$ and $f^{-1}(T) = S$.

33 $\varphi = \text{atan2}(y, x)$ (degrees) and $\theta = \text{atan2}(y, x)$ (radians) are the angles of the vector (x, y) in the Cartesian plane. The angle θ is measured counter-clockwise from the positive x-axis to the vector (x, y) . The angle φ is measured clockwise from the positive x-axis to the vector (x, y) . The angle θ is defined for all $(x, y) \neq (0, 0)$. The angle φ is defined for all $(x, y) \neq (0, 0)$.

33



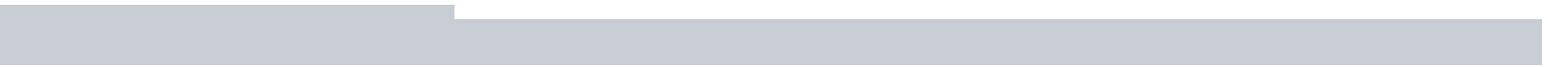
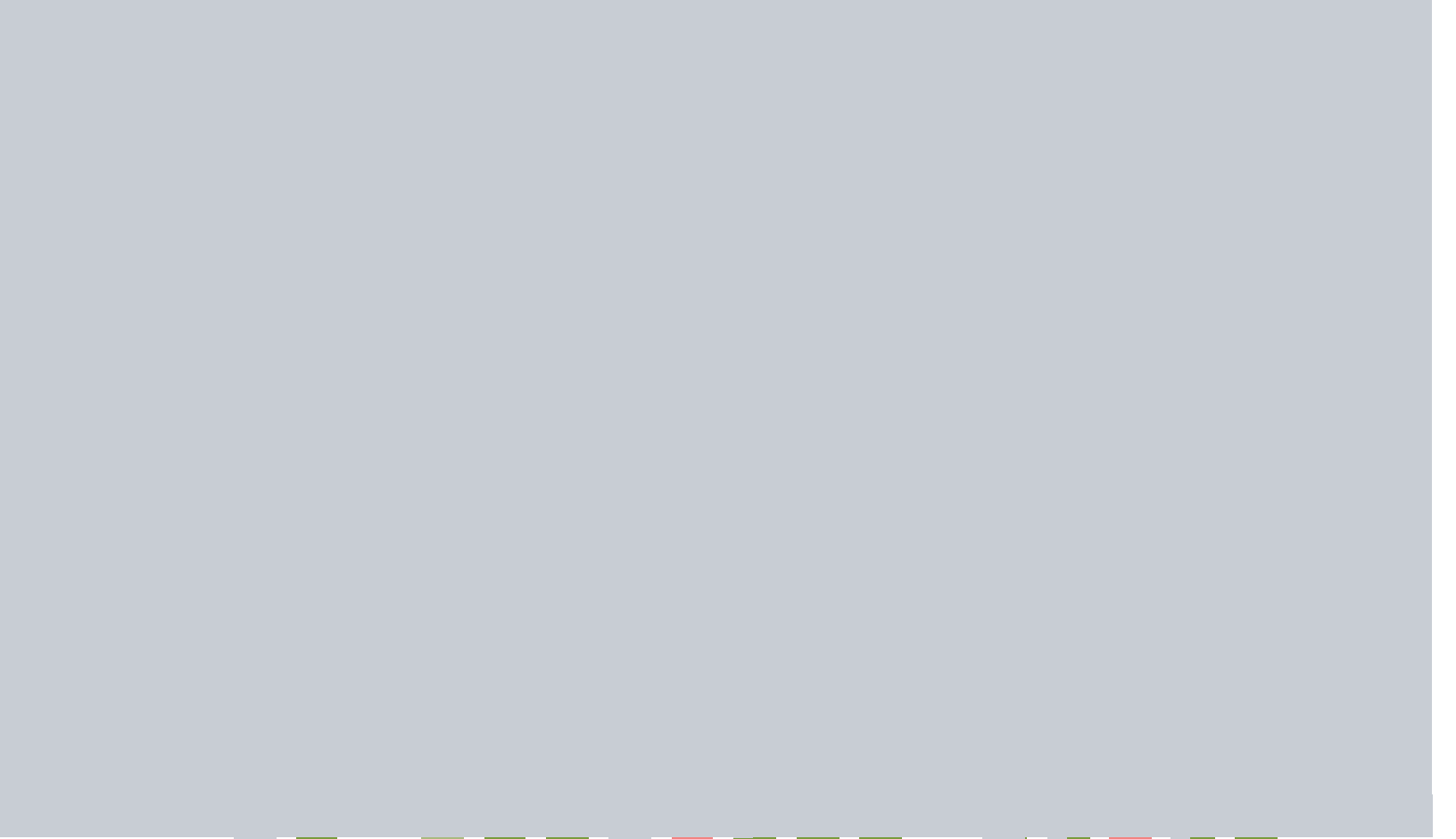


...and the impact of the new scheme on the UK's trade with developing countries.

... (2) ... (3) ... (4) ... (5) ... (6) ... (7) ... (8) ... (9) ... (10) ... (11) ... (12) ... (13) ... (14) ... (15) ... (16) ... (17) ... (18) ... (19) ... (20) ... (21) ... (22) ... (23) ... (24) ... (25) ... (26) ... (27) ... (28) ... (29) ... (30) ... (31) ... (32) ... (33) ... (34) ... (35) ... (36) ... (37) ... (38) ... (39) ... (40) ... (41) ... (42) ... (43) ... (44) ... (45) ... (46) ... (47) ... (48) ... (49) ... (50) ... (51) ... (52) ... (53) ... (54) ... (55) ... (56) ... (57) ... (58) ... (59) ... (60) ... (61) ... (62) ... (63) ... (64) ... (65) ... (66) ... (67) ... (68) ... (69) ... (70) ... (71) ... (72) ... (73) ... (74) ... (75) ... (76) ... (77) ... (78) ... (79) ... (80) ... (81) ... (82) ... (83) ... (84) ... (85) ... (86) ... (87) ... (88) ... (89) ... (90) ... (91) ... (92) ... (93) ... (94) ... (95) ... (96) ... (97) ... (98) ... (99) ... (100) ...

... (101) ... (102) ... (103) ... (104) ... (105) ... (106) ... (107) ... (108) ... (109) ... (110) ... (111) ... (112) ... (113) ... (114) ... (115) ... (116) ... (117) ... (118) ... (119) ... (120) ... (121) ... (122) ... (123) ... (124) ... (125) ... (126) ... (127) ... (128) ... (129) ... (130) ... (131) ... (132) ... (133) ... (134) ... (135) ... (136) ... (137) ... (138) ... (139) ... (140) ... (141) ... (142) ... (143) ... (144) ... (145) ... (146) ... (147) ... (148) ... (149) ... (150) ...





1. The first part of the document discusses the importance of maintaining accurate records of all transactions. This includes not only sales and purchases but also expenses and income. Proper record-keeping is essential for determining the correct amount of tax owed and for identifying potential deductions.

2. The second part of the document focuses on the various tax forms that must be filed. These forms include the 1040, 1041, 990, and others, depending on the taxpayer's situation. Each form has specific requirements and deadlines that must be followed to avoid penalties.

3. The third part of the document addresses the issue of tax credits and deductions. These provisions can significantly reduce the amount of tax owed, but they must be properly documented and reported on the tax return.

4. The fourth part of the document discusses the importance of seeking professional advice from a tax advisor or accountant. These professionals can provide personalized guidance based on the taxpayer's specific circumstances and help ensure that all tax obligations are met correctly.

5. The fifth part of the document covers the consequences of non-compliance with tax laws. This includes penalties, interest, and the potential for criminal prosecution in severe cases. It is crucial for taxpayers to understand the risks of failing to file taxes or providing false information.

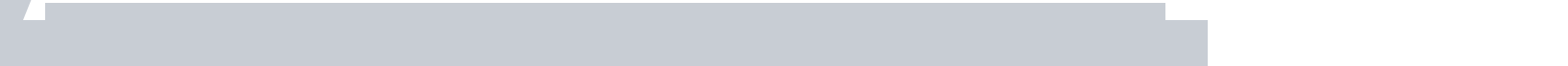
6. The sixth part of the document discusses the importance of staying up-to-date on changes in tax laws. Tax laws are constantly evolving, and taxpayers must be aware of these changes to ensure they are following the most current rules.

7. The seventh part of the document addresses the issue of tax planning. This involves looking ahead and making strategic decisions to minimize tax liability. This can include things like timing income and deductions, using tax-advantaged accounts, and other techniques.

8. The eighth part of the document discusses the importance of keeping all tax-related documents organized and accessible. This makes it much easier to prepare and file tax returns and to respond to any inquiries from the IRS.

9. The ninth part of the document discusses the importance of understanding the different types of taxes. This includes income tax, property tax, sales tax, and others. Each type of tax has its own rules and requirements, and taxpayers must understand these rules to avoid mistakes.

10. The tenth part of the document discusses the importance of seeking help if a taxpayer is having difficulty understanding their tax obligations. This can include reaching out to the IRS for assistance or consulting with a tax professional.



■

100%

90%

80%

70%

60%

50%

40%

30%

20%

10%

0%

Figure 1: The impact of the UK's new trading scheme on the value of exports to developing countries. The chart shows a significant increase in the value of exports to developing countries, particularly in the categories of machinery, transport equipment, and chemicals. The value of exports to developing countries is projected to increase from approximately 10% of total UK exports in 2015 to over 30% by 2025. The chart also shows that the value of exports to developing countries is projected to increase from approximately 10% of total UK exports in 2015 to over 30% by 2025. The chart also shows that the value of exports to developing countries is projected to increase from approximately 10% of total UK exports in 2015 to over 30% by 2025.

Figure 2: The impact of the UK's new trading scheme on the value of exports to developing countries. The chart shows a significant increase in the value of exports to developing countries, particularly in the categories of machinery, transport equipment, and chemicals. The value of exports to developing countries is projected to increase from approximately 10% of total UK exports in 2015 to over 30% by 2025. The chart also shows that the value of exports to developing countries is projected to increase from approximately 10% of total UK exports in 2015 to over 30% by 2025. The chart also shows that the value of exports to developing countries is projected to increase from approximately 10% of total UK exports in 2015 to over 30% by 2025.

(b) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (c) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (d) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (e) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (f) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (g) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (h) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (i) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (j) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (k) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (l) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (m) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (n) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (o) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (p) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (q) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (r) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (s) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (t) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (u) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (v) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (w) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (x) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (y) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$
 (z) $\frac{1}{2}(\frac{1}{2} + \frac{1}{2}) = \frac{1}{2}$, so $\frac{1}{2} = \frac{1}{2}$

	Enhanced Preferences				Standard Preferences			
	Total # of products exported	# of products facing duty-free exports	# of products not included in Enhanced Preferences	# of products facing tariffs (lower than MFN rate but non-zero rate) under Enhanced Preferences	# of products facing duty-free exports	# of products not included in Standard Preferences	# of products facing tariff (lower than MFN rate but non-zero rate) under Standard Preferences	
Angola	2	2	2	0	0	2	4	
Bangladesh	14	9	5	2	5	6	6	
Bhutan	2	2	2	0	2	2	6	
Cambodia	6	5	2	1	2	0	2	
Comoros	9	9	0	0	6	0	3	
Djibouti	2	2	3	0	2	3	2	
Kiribati	4	4	0	0	3	0	1	
Lao PDR	8	5	8	2	5	9	3	
Myanmar	12	9	5	3	9	8	5	
Sao Tome and Principe	6	6	0	0	5	0	1	
Senegal	4	9	2	3	9	2	9	
Solomon Islands	0	2	2	0	3	2	5	
Timor-Leste	2	2	1	0	2	1	1	
Tuvalu	6	6	0	0	6	0	0	
Zambia	9	2	5	0	8	6	2	

Source: 15 0

... (2018) 18 ...

... (2018) 18 ...

18 ... (2018) 18 ...







REFERENCES

1. World Bank (2010) World Development Report 2010: Development in a Changing World. Washington, DC: World Bank.

2. World Bank (2011) World Development Report 2011: Learning to Realize Education's Promise. Washington, DC: World Bank.

3. World Bank (2012) World Development Report 2012: Gender Equality and Empowerment Women's Empowerment and the Quality of Growth. Washington, DC: World Bank.

4. World Bank (2013) World Development Report 2013: Jobs for the Future. Washington, DC: World Bank.

5. World Bank (2014) World Development Report 2014: Employment and Decent Work. Washington, DC: World Bank.

6. World Bank (2015) World Development Report 2015: Mindful Development. Washington, DC: World Bank.

7. World Bank (2016) World Development Report 2016: Digital Dividends. Washington, DC: World Bank.

8. World Bank (2017) World Development Report 2017: Employment and Decent Work. Washington, DC: World Bank.

9. World Bank (2018) World Development Report 2018: Learning to Realize Education's Promise. Washington, DC: World Bank.

10. World Bank (2019) World Development Report 2019: The State of the World 2019. Washington, DC: World Bank.

11. World Bank (2020) World Development Report 2020: The State of the World 2020. Washington, DC: World Bank.

12. World Bank (2021) World Development Report 2021: The State of the World 2021. Washington, DC: World Bank.

13. World Bank (2022) World Development Report 2022: The State of the World 2022. Washington, DC: World Bank.

14. World Bank (2023) World Development Report 2023: The State of the World 2023. Washington, DC: World Bank.

15. World Bank (2024) World Development Report 2024: The State of the World 2024. Washington, DC: World Bank.

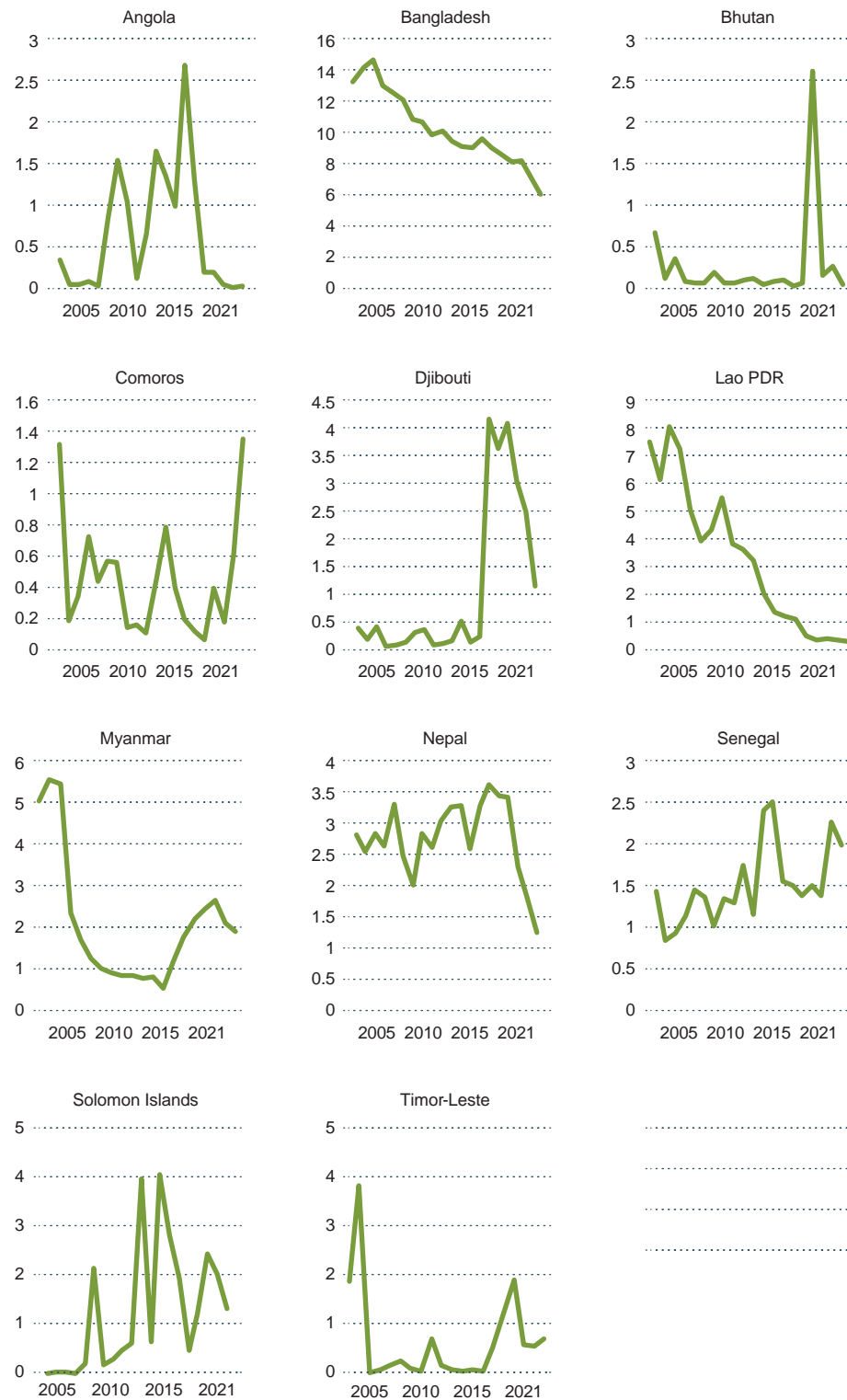
Areas



Country	Exports (thousand \$)				Share in United Kingdom's imports from DCTS
	2005	2010	2015	2021	Comprehensive Preference countries 2021
South Sudan	-	-	3	0	0.0
Tuvalu	1	4	3	0	0.0
Central African Republic	0	2	9	0	-
Kiribati	8	2	1	0	-
Guinea-Bissau	2	0	1	1	-
Total	2,319,855	3,360,252	6,632,527	4,948,662	100



Share of the United Kingdom market in the total exports of individual countries in the graduation process, 2000-2021



Source: 1



Export composition of the leading exporters of apparel to the United Kingdom among the countries in the graduating process, HS 2-digit level

Source:

0 1082

Commodity Exports



LaoPDR

HS Code	Commodity	Export (million \$)	% of total exports to United Kingdom
64	0903	3.3	4.3
	0904	59	0.9
	0905	55	9.7
	0909	1.5	5.2
62	6201		
	6202		
	6203		
	6204		
	6205		
	6206		
	6207		
	6208		
	6209		
	6210		
	6211		
	6212		
	6213		
	6214		
	6215		
	6216		
	6217		
	6218		
	6219		
	6220		
	6221		
	6222		
	6223		
	6224		
	6225		
	6226		
	6227		
	6228		
	6229		
	6230		
	6231		
	6232		
	6233		
	6234		
	6235		
	6236		
	6237		
	6238		
	6239		
	6240		
	6241		
	6242		
	6243		
	6244		
	6245		
	6246		
	6247		
	6248		
	6249		
	6250		
	6251		
	6252		
	6253		
	6254		
	6255		
	6256		
	6257		
	6258		
	6259		
	6260		
	6261		
	6262		
	6263		
	6264		
	6265		
	6266		
	6267		
	6268		
	6269		
	6270		
	6271		
	6272		
	6273		
	6274		
	6275		
	6276		
	6277		
	6278		
	6279		
	6280		
	6281		
	6282		
	6283		
	6284		
	6285		
	6286		
	6287		
	6288		
	6289		
	6290		
	6291		
	6292		
	6293		
	6294		
	6295		
	6296		
	6297		
	6298		
	6299		

Maar



N

epl

HS Code	Commodity	Exports (million \$)	% of total exports to United Kingdom
61	Knitwear	66	3.6
	Knitwear of cotton	24	1.0
	Knitwear of wool	11	0.51
57	Textiles	5.5	0.24
	Textiles of cotton	4.7	0.28
	Textiles of wool	0.3	0.15
62	Knitwear	3.5	0.15
	Knitwear of cotton	0.6	0.027
	Knitwear of wool	0.4	0.17
56	Textiles	0.9	0.44
	Textiles of cotton	0.8	0.39
65	Textiles	0.8	0.37
	Textiles of cotton	0.8	0.35
19	Textiles	0.6	0.28
	Textiles of cotton, e.g. bed linen	0.4	0.17
	Textiles of wool	0.3	0.12
95	Textiles	0.3	0.14
	Textiles of cotton	0.2	0.10

Source: epl

6

05

ad



u

u

HS Code	Commodity	Exports (million \$)	% of total exports to United Kingdom
39			



