THE CORRELATION OF MALAYSIA TOTAL EXPORTS WITH MALAYSIA TRADING AND BILATERAL PARTNER COUNTRIES

DAILAMI AIMAN BIN BOLKIM

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By

DAILAMI AIMAN BIN BOLKIM

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Universiti Utara Malaysia

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Abstrak

Malaysia yang merupakan sebahagian daripada republik Asean, telah membangunkan ekonominya melalui perdagangan antarabangsa. Mengikut teori Keluaran Dalam Negara Kasar (KDNK), eksport adalah salah satu komponen yang meningkatkan ekonomi sesebuah negara termasuk Malaysia dalam konteks ini. Objektif kajian ini adalah untuk menganalisa hubungan korelasi antara eksport Malaysia dengan 11 negara yang sering berdagang dengan Malaysia . Di samping itu kajian ini akan menunjukkan kepentingan pembolehubah eksport Malaysia seperti industri eksport dan perhubungan dan perjanjian dua hala perdagangan. Kajian ini akan menjalankan analisis korelasi antara eksport Malaysia dengan 11 negara yang sering mengeksport dari Malaysia. Untuk melaksanakan analisa korelasi data panel jumlah eksport ke 11 negara ini pada tahun 2011 sehingga 2017 mengikut industri-industri eksport yang utama (elektrik&elektronik, minyak petroleum, getah dan minyak sawit) akan digunakan. Negara yang mempunyai korelasi yang tinggi dengan eksport Malaysia ialah Singapura. Manakala, industri minyak sawit mempunyai korelasi yang tinggi antara eksport Malaysia dengan negara-negara yang mempunyai perjanjian perdagangan dua hala bersama Malaysia. Hasil kajian merumuskan bahawa perjanjian dan perhubungan perdagangan dua hala Malaysia pada era moden lebih bermanfaat untuk Malaysia jika dibandingkan dengan perjanjian perdagangan pelbagai hala. Selain itu, kelebihan perbandingan relatif dalam eksport Malaysia membantu Malaysia dalam mengeksport ke negara-negara maju seperti Amerika Syarikat dan Germany tanpa perjanjian perdagangan pelbagai hala.

Kata kunci: Keluaran Dalam Negara Kasar (KDNK), perjanjian perdagangan dua hala, perjanjian perdagangan pelbagai hala, kelebihan perbandingan relatif

Abstract

Malaysia as part of an Asean region has been growing its economy via international trade. It is viewed that in the GDP theory, net exports increase the GDP growth including Malaysia in this context. The objective of this research paper is to examine the correlation between Malaysia total export and the 11 major trading countries. In addition, it will oversee the importance of Malaysia total exports variables such as export industry and bilateral free trade agreement. This study examines the correlation between Malaysia total exports to the world and the 11 major trading partner countries. Panel data of Malaysia total exports to 11 countries from 2011-2017 will be analysed based on industries such as electrical & electronics, petrochemical, palm oil and rubber to conduct the correlation analysis. Singapore recorded the highest correlation with Malaysia's total export. On the other hand, among the Malaysia bilateral trade partner countries, the palm oil sector has the highest correlation with Malaysia total exports. The findings of this study concluded that in this modern era Bilateral FTA benefits outweigh Multilateral FTA for Malaysia export performance. To a certain extent due to Malaysia's relative competitive advantage of its resources it can export to developed countries like Germany and USA without so much aid from multilateral FTA.

Keyword: GDP, bilateral free trade agreement, multilateral free trade agreement, relative competitive advantage

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Acronyms

FTA	Free Trade Agreements
OECD	Organisation of Economic Development
E&E	Electrical and electronics product
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
PWC	Price Waterhouse Coopers
EU	European Union
CGE	Computable General Equilibrium Model
MATRADE	Malaysia External Trade Development Corporation
MITI	Ministry of International Trade and Industry
TPPA	Trans Pacific Partnership Agreement
AFTA	Asean Free Trade Agreement
AANZFTA	Asean Australia New Zealand Free Trade Agreement
AHKFT	Asean Hong Kong China Free Trade Agreement
MJEPA	Malaysia Japan Economic Partnership Agreement
MPCEPA	Malaysia- Pakistan Closer Economic Partnership Agreement
MNZFT	Malaysia- New Zealand Free Trade Agreement
CEEC	Central Eastern Europe Country
MCFTA	Malaysia-Chile Free Trade Agreement
MICECA	Malaysia-India Comprehensive Economic Cooperation Agreement
MAFTA	Malaysia-Australia Free Trade Agreement
LDC	Least Developed Country
RCA	Relative Comparative Advantage
MPOB	Malaysia Palm Oil Board

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Malaysia's economy has progressed from relying on agricultural and primary commodities shifting to manufactured goods. The economy progress is due to its long-term political stability, good economic management and pragmatic leadership. Malaysia is blessed with sound infrastructure, reliable healthcare and education system as well as an increasingly advanced and diversified economy.

Malaysia has realized that for the country to progress and develop the economy it has to increase its net exports by being proactive in the international trade. Back in the early 90s Malaysia devised a plan with the aspiration to become a developed country with the "Vision 2020" or "Wawasan 2020" slogan by doubling the country's real gross domestic product in every ten years between 1990 and 2020. To achieve this rapid growth, it requires Malaysia to grow by an average of about 7 percent (in real terms) annually over the next 30 years (Prime Minister Office, 2019).

In the spirit of Vision 2020 an evaluation towards this vision needs to be carried out as the year 2020 is around the corner. With this analysis it will reveal Malaysia's progress towards the developed country status vision and if it is still lagging behind, what are the actions need to be taken especially towards Malaysia's GDP growth and international trade policy. The Vision 2020, if Malaysia succeed and assuming a roughly 2.5 percent annual rate of population growth by the

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Appendix 1

Malaysia total exports based on country and industry

Country	Year	Export	E&E	Petroche	Palmoil	Rubber
Indonesia	2011	20,841,069,137	1,935,164,644	2,695,796,368	341,815,875	244,775,937
Indonesia	2012	27,609,223,523	2,183,234,252	7,155,585,192	215,136,622	250,903,741
Indonesia	2013	33,110,354,495	2,171,196,430	13,023,090,435	323,766,093	244,786,082
Indonesia	2014	31,757,514,136	2,036,596,542	11,976,746,052	173,389,048	255,258,321
Indonesia	2015	29,104,162,138	1,953,190,313	8,570,614,276	156,726,210	278,369,341
Indonesia	2016	27,945,341,882	1,925,042,137	7,163,860,968	179,636,728	296,970,624
Indonesia	2017	33,630,868,000	2,185,899,000	10,567,890,000	228,849,000	417,029,000
Singapore	2011	88,190,613,000	26,992,446,000	20,127,467,000	1,974,943,000	395,258,000
Singapore	2012	95,552,558,816	27,502,671,489	27,276,529,164	2,107,093,894	347,506,198
Singapore	2013	100,256,596,820	31,576,863,885	28,564,598,488	1,392,923,850	329,243,235
Singapore	2014	108,727,759,669	33,807,201,048	32,193,914,990	1,411,879,520	378,313,684
Singapore	2015	108,388,432,120	38,945,410,628	22,237,376,987	1,095,878,301	402,057,272
Singapore	2016	114,442,470,403	42,968,809,288	21,419,614,761	1,280,154,909	415,960,900
Singapore	2017	135,628,300,000	54,692,593,000	24,763,411,000	1,548,735,000	437,728,000
China	2011	91,550,735,839	30,409,912,560	5,757,429,326	14,185,644,001	10,664,772,593
China	2012	88,792,546,787	31,136,108,881	7,217,711,750	10,960,990,064	9,111,552,068
China	2013	97,042,961,310	33,074,755,019	10,357,402,618	9,496,169,162	8,348,770,401
China	2014	92,286,493,833	36,443,759,008	10,544,345,955	8,019,013,789	5,826,972,153
China	2015	101,536,570,757	36,643,251,032	14,664,716,019	6,231,774,774	5,228,590,132
China	2016	98,577,904,941	36,224,982,696	11,046,865,363	6,066,712,007	4,767,182,773
China	2017	125,956,950,000	45,520,301,000	11,902,762,000	6,006,774,000	8,042,318,000
India	2011	28,154,369,813	5,037,257,601	7,123,541,386	5,083,646,938	269,073,082
India	2012	29,324,873,521	4,742,492,102	5,864,505,765	7,424,218,470	186,634,934

India	2013	25,735,088,687	3,600,013,750	6,722,000,562	5,428,835,321	185,491,850
India	2014	31,893,417,723	3,038,479,158	8,729,872,739	7,753,289,843	266,640,128
India	2015	31,660,476,706	3,923,028,768	5,876,769,901	8,266,325,781	285,688,954
India	2016	31,998,988,081	4,900,172,233	5,778,750,112	7,392,428,596	292,653,032
India	2017	34,530,788,000	5,763,601,000	6,559,211,000	5,973,232,000	331,577,000
Thailand	2011	35,742,462,276	6,606,142,755	6,907,089,184	671,504,103	609,524,147
Thailand	2012	37,633,134,427	6,970,009,430	6,259,088,548	422,654,768	621,742,060
Thailand	2013	39,923,344,230	8,001,010,315	6,371,963,618	281,427,991	548,084,164
Thailand	2014	40,205,405,851	9,035,622,894	5,939,120,466	442,766,124	541,204,620
Thailand	2015	44,387,183,796	10,668,015,855	7,451,667,077	333,862,354	584,441,667
Thailand	2016	44,092,398,248	10,256,378,039	6,432,797,561	377,118,421	588,857,264
Thailand	2017	50,508,049,000	12,046,442,000	8,604,922,000	338,594,000	673,977,000
Japan	2011	81,368,044,389	16,013,675,823	39,883,036,330	2,603,014,280	824,781,142
Japan	2012	83,401,084,113	14,050,944,255	45,238,909,732	2,229,605,170	828,628,326
Japan	2013	79,196,704,359	13,599,027,049	43,607,697,154	1,608,093,703	804,195,247
Japan	2014	82,617,117,587	14,502,749,097	44,723,841,208	1,721,538,550	831,450,970
Japan	2015	72,683,065,165	15,914,300,555	31,267,555,683	1,649,821,328	1,036,048,526
Japan	2016	63,743,305,076	16,081,681,184	21,362,018,539	1,484,557,604	1,069,351,966
Japan	2017	75,596,859,000	19,824,110,000	26,280,321,000	1,732,113,000	1,345,058,000
Pakistan	2011	7,804,390,106	84,375,221	2,803,978	6,231,140,583	85,265,053
Pakistan	2012	5,733,110,506	107,632,055	4,249,735	4,118,992,604	72,223,858
Pakistan	2013	5,214,316,520	69,421,368	252,864,330	3,467,216,969	64,015,745
Pakistan	2014	3,977,482,880	51,156,172	283,873,811	2,072,483,754	58,555,959
Pakistan	2015	4,121,583,379	103,483,840	369,730,336	1,645,084,058	75,365,169
Pakistan	2016	4,355,060,325	93,677,789	225,779,396	2,382,123,486	69,125,221
Pakistan	2017	5,044,253,000	101,957,000	7,751,000	2,551,869,000	72,919,000
Australia	2011	25,682,571,837	3,239,742,658	12,219,145,597	832,781,505	533,722,383
Australia	2012	29,096,609,591	3,018,373,129	14,357,955,552	693,478,853	523,305,737
Australia	2013	29,225,088,110	2,778,236,685	13,605,682,673	577,364,318	490,259,557

Australia	2014	32,966,602,400	2,921,452,120	15,500,100,044	681,006,689	573,659,635
Australia	2015	28,081,618,694	2,674,504,901	8,289,278,522	719,140,500	640,790,336
Australia	2016	26,818,910,579	2,421,351,353	10,581,332,843	757,418,630	625,286,570
Australia	2017	32,376,583,000	3,324,852,000	14,613,765,000	938,881,000	685,915,000
New Zealand	2011	3,011,717,041	496,867,612	1,059,367,199	214,845,794	59,295,398
New Zealand	2012	3,611,440,622	463,285,931	1,542,510,461	207,432,342	62,784,966
New Zealand	2013	4,356,169,961	381,053,033	2,176,077,213	201,334,254	62,831,546
New Zealand	2014	5,239,743,633	412,814,114	2,761,063,543	199,125,205	199,125,205
New Zealand	2015	4,016,512,164	346,788,670	1,643,188,052	224,215,911	224,215,911
New Zealand	2016	3,036,162,158	344,488,655	682,544,459	239,194,341	239,194,341
New Zealand	2017	4,511,353,000	361,110,000	1,641,804,000	806,499,000	306,499,000
USA	2011	57,652,991,409	22,150,036,640	252,158,987	22,150,036,640	4,161,521,082
USA	2012	60,791,291,762	25,491,203,909	510,021,184	25,491,203,909	4,351,136,892
USA	2013	58,054,904,719	25,900,158,350	400,099,131	25,900,158,350	4,272,687,122
USA	2014	64,404,766,391	30,321,496,084	138,529,005	2,789,645,285	4,409,655,284
USA	2015	73,668,958,695	35,316,958,246	316,086,080	2,298,069,501	5,340,273,055
USA	2016	80,232,982,034	38,468,815,959	510,336,052	2,206,159,884	5,240,207,739
USA	2017	88,680,166,000	40,432,943,000	768,053,000	2,319,500,000	6,318,965,000
Germany	2011	16,512,053,666	9,427,364,448	83,036,088	549,553,848	2,435,730,241
Germany	2012	16,019,893,073	7,106,833,341	135,292,951	438,708,002	2,035,854,649
Germany	2013	16,512,053,666	7,921,295,958	98,406,808	290,659,324	1,912,700,681
Germany	2014	17,859,460,242	9,243,911,092	114,564,234	285,713,553	1,625,487,059
Germany	2015	19,638,846,453	10,086,619,403	101,497,657	321,391,799	1,617,153,346
Germany	2016	22,295,924,888	11,945,291,384	115,427,158	284,947,693	1,713,170,686
Germany	2017	26,673,130,000	13,767,490,000	131,560,000	180,522,000	2,103,865,000

Source: *Department of Statistics Malaysia*

Appendix II

Table of Correlation results

Correlations

		Malaysia total exports	Indonesia
Malaysia total exports	Pearson Correlation	1	.565
	Sig. (2-tailed)		.186
	N	7	7
Indonesia	pearson Correlation	.565	1
	Sig. (2-tailed)	.186	
	N	7	7

Correlations

		Malaysia total exports	Singapore
Malaysia total exports	Pearson Correlation	1	.977**
	Sig. (2-tailed)		.000
	N	7	7
Singapore	Pearson Correlation	.977**	1
	Sig. (2-tailed)	.000	
	N	7	7

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Malaysia exports	China
Malaysia exports	Pearson Correlation	1	.950**
	Sig. (2-tailed)		.001
	N	7	7
China	Pearson Correlation	.950**	1
	Sig. (2-tailed)	.001	
	N	7	7

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Malaysia exports	India
Malaysia exports	Pearson Correlation	1	.824*
	Sig. (2-tailed)		.022
	N	7	7
India	Pearson Correlation	.824*	1
	Sig. (2-tailed)	.022	
	N	7	7

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

		Malaysia exports	Thailand
Malaysia exports	Pearson Correlation	1	.953**
	Sig. (2-tailed)		.001
	N	7	7
Thailand	Pearson Correlation	.953**	1
	Sig. (2-tailed)	.001	
	N	7	7

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Malaysia exports	Japan
Malaysia exports	Pearson Correlation	1	-.401
	Sig. (2-tailed)		.372
	N	7	7
Japan	Pearson Correlation	-.401	1
	Sig. (2-tailed)	.372	
	N	7	7

Correlations

		Malaysia exports	Pakistan
Malaysia exports	Pearson Correlation	1	-.412
	Sig. (2-tailed)		.358
	N	7	7
Pakistan	Pearson Correlation	-.412	1
	Sig. (2-tailed)	.358	
	N	7	7

Correlations

		Malaysia exports	Australia
Malaysia exports	Pearson Correlation	1	.545
	Sig. (2-tailed)		.206
	N	7	7
Australia	Pearson Correlation	.545	1
	Sig. (2-tailed)	.206	
	N	7	7

Correlations

		Malaysia exports	NZ
Malaysia exports	Pearson Correlation	1	.357
	Sig. (2-tailed)		.432
	N	7	7
NZ	Pearson Correlation	.357	1
	Sig. (2-tailed)	.432	
	N	7	7

Correlations

		Malaysia exports	USA
Malaysia exports	Pearson Correlation	1	.918**
	Sig. (2-tailed)		.004
	N	7	7
USA	Pearson Correlation	.918**	1
	Sig. (2-tailed)	.004	
	N	7	7

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Malaysia exports	Germany
Malaysia exports	Pearson Correlation	1	.961**
	Sig. (2-tailed)		.001
	N	7	7
Germany	Pearson Correlation	.961**	1
	Sig. (2-tailed)	.001	
	N	7	7

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Australia	E&E
Australia	Pearson Correlation	1	.314
	Sig. (2-tailed)		.492
	N	7	7
E&E	Pearson Correlation	.314	1
	Sig. (2-tailed)	.492	
	N	7	7

Correlations

		Australia	Petro
Australia	Pearson Correlation	1	.681
	Sig. (2-tailed)		.092
	N	7	7
Petro	Pearson Correlation	.681	1
	Sig. (2-tailed)	.092	
	N	7	7

Correlations

		Australia	Palm Oil
Australia	Pearson Correlation	1	.035
	Sig. (2-tailed)		.940
	N	7	7
Palm Oil	Pearson Correlation	.035	1
	Sig. (2-tailed)	.940	
	N	7	7

Correlations

		Australia	Rubber
Australia	Pearson Correlation	1	.264
	Sig. (2-tailed)		.568
	N	7	7
Rubber	Pearson Correlation	.264	1
	Sig. (2-tailed)	.568	
	N	7	7

Correlations

		Japan	E&E
Japan	Pearson Correlation	1	-.371
	Sig. (2-tailed)		.412
	N	7	7
E&E	Pearson Correlation	-.371	1
	Sig. (2-tailed)	.412	
	N	7	7

Correlations

		Japan	Petro
Japan	Pearson Correlation	1	.909**
	Sig. (2-tailed)		.005
	N	7	7
Petro	Pearson Correlation	.909**	1
	Sig. (2-tailed)	.005	
	N	7	7

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Japan	Palm Oil
Japan	Pearson Correlation	1	.613
	Sig. (2-tailed)		.143
	N	7	7
Palm Oil	Pearson Correlation	.613	1
	Sig. (2-tailed)	.143	
	N	7	7

Correlations

		Japan	Rubber
Japan	Pearson Correlation	1	-.571
	Sig. (2-tailed)		.180
	N	7	7
Rubber	Pearson Correlation	-.571	1
	Sig. (2-tailed)	.180	
	N	7	7

Correlations

		India	E&E
India	Pearson Correlation	1	.345
	Sig. (2-tailed)		.449
	N	7	7
E&E	Pearson Correlation	.345	1
	Sig. (2-tailed)	.449	
	N	7	7

Correlations

		India	Petro
India	Pearson Correlation	1	-.011
	Sig. (2-tailed)		.982
	N	7	7
Petro	Pearson Correlation	-.011	1
	Sig. (2-tailed)	.982	
	N	7	7

Correlations

		India	Palm Oil
India	Pearson Correlation	1	.476
	Sig. (2-tailed)		.280
	N	7	7
Palm Oil	Pearson Correlation	.476	1
	Sig. (2-tailed)	.280	
	N	7	7

Correlations

		India	Rubber
India	Pearson Correlation	1	.830*
	Sig. (2-tailed)		.021
	N	7	7
Rubber	Pearson Correlation	.830*	1
	Sig. (2-tailed)	.021	
	N	7	7

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

		Pakistan	E&E
Pakistan	Pearson Correlation	1	.158
	Sig. (2-tailed)		.734
	N	7	7
E&E	Pearson Correlation	.158	1
	Sig. (2-tailed)	.734	
	N	7	7

Correlations

		Pakistan	Petro
Pakistan	Pearson Correlation	1	-.729
	Sig. (2-tailed)		.063
	N	7	7
Petro	Pearson Correlation	-.729	1
	Sig. (2-tailed)	.063	
	N	7	7

Correlations

		Pakistan	Palm Oil
Pakistan	Pearson Correlation	1	.977**
	Sig. (2-tailed)		.000
	N	7	7
Palm Oil	Pearson Correlation	.977**	1
	Sig. (2-tailed)	.000	
	N	7	7

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Pakistan	Rubber
Pakistan	Pearson Correlation	1	.742
	Sig. (2-tailed)		.056
	N	7	7
Rubber	Pearson Correlation	.742	1
	Sig. (2-tailed)	.056	
	N	7	7

Correlations

		New Zealand	E&E
New Zealand	Pearson Correlation	1	-.269
	Sig. (2-tailed)		.560
	N	7	7
E&E	Pearson Correlation	-.269	1
	Sig. (2-tailed)	.560	
	N	7	7

Correlations

		New Zealand	Petro
New Zealand	Pearson Correlation	1	.933**
	Sig. (2-tailed)		.002
	N	7	7
Petro	Pearson Correlation	.933**	1
	Sig. (2-tailed)	.002	
	N	7	7

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		New Zealand	Palm Oil
New Zealand	Pearson Correlation	1	.027
	Sig. (2-tailed)		.955
	N	7	7
Palm Oil	Pearson Correlation	.027	1
	Sig. (2-tailed)	.955	
	N	7	7

Correlations

		New Zealand	Rubber
New Zealand	Pearson Correlation	1	.305
	Sig. (2-tailed)		.506
	N	7	7
Rubber	Pearson Correlation	.305	1
	Sig. (2-tailed)	.506	
	N	7	7