# NEXUS OF IMPORTS IN INFLUENCING
# EXPORTS, DOMESTIC DEMAND AND SERVICES
# AMONGST ASEAN-5 COUNTRIES

By

ANTHONY DASS
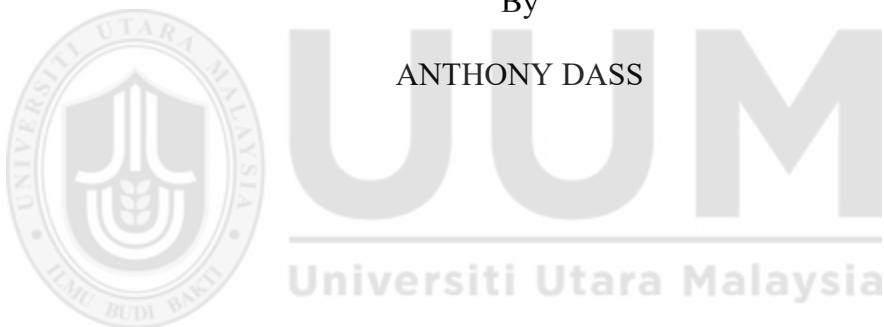
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# ABSTRACT

There has been growing concern that trade-dependent ASEAN-5 (Indonesia, Malaysia, Philippines, Singapore and Thailand) countries are losing their grip as trading nations due to the weaker contribution of net exports to Gross Domestic Product (GDP) with domestic demand contribution to GDP improving. This casts doubts on the Export-Led Growth Strategy (ELGS) with the growing perception that the Domestic Demand-Led Growth Strategy (DDLGS) is gaining prominence. The main aim of this study is to determine the connection between import and export components on private consumption, public consumption, gross fixed capital formation, exports, imports and services. Autoregressive Distributive Lag (ARDL) and Pedroni's Panel cointegration techniques were applied to the data covered from the year 1996 to 2015. The results explain that import components significantly influence domestic demand variables and exports. The results also support that the domestic demand contribution to GDP is being overestimated while net exports contribution to GDP is underestimated due to the impact of imported components. At the same time, the results unveil a significant and positive impact of imported components on services which indicate the overestimating services contribution to GDP. The results demonstrate a significant positive impact of export components on domestic demand and net exports. Finally, the estimates of export components reveal positive and significant impact on the services sector. The main policy implication that can be deduced is that both import and export components significantly influence domestic demand, net exports and services. These components benefit from the ASEAN-5 integration and from their respective country's policies. The authorities should design their policies by taking into consideration the impact of these components and regional integration to ensure they benefit in a more effective and efficient manner.

**Keywords:** ASEAN-5, ARDL, Pedroni's Panel cointegration, imports components, exports components.

# ABSTRAK

Wujud kebimbangan di kalangan negara ASEAN-5 (Indonesia, Malaysia, Filipina, Singapura dan Thailand) yang bergantung kepada perdagangan akan kehilangan kedudukannya sebagai negara perdagangan disebabkan kekurangan sumbangan eksport bersih kepada Keluaran Dalam Negara Kasar (KDNK) berbanding sumbangan permintaan domestic kepada peningkatan KDNK. Hal ini menimbulkan kesangsian tentang peranan Strategi Exports Pimpinan Pertumbuhan (ELGS) terhadap pertumbuhan ekonomi negara serta meningkatkan tanggapan positif terhadap hubungan Strategi Permintaan Domestik Pimpinan Pertumbuhan (DDLG) dengan pertumbuhan ekonomi negara. Matlamat utama kajian ini adalah untuk menentukan hubungan antara komponen import dan eksport ke atas penggunaan swasta, penggunaan awam, pembentukan modal tetap kasar, eksport, import dan perkhidmatan. Kaedah Model Autoregresif Taburan Lat (ARDL) dan Teknik Kointegrasi Panel Pedroni telah diguna bagi tempoh data dari tahun 1996 hingga 2015. Hasil kajian menunjukkan dengan signifikasi komponen import mempengaruhi pemboleh ubah permintaan domestik dan eksport. Ianya menyokong bahawa sumbangan permintaan domestik kepada KDNK telah dinilai secara berlebihan, manakala sumbangan eksport bersih dinilai secara berkurangan. Keputusan juga memperlihatkan impak positif dan signifikan daripada komponen import ke atas perkhidmatan. Menunjukkan yang sumbangan perkhidmatan kepada KDNK telah dinilai secara berlebihan. Kesan komponen eksport ke atas pemboleh ubah permintaan domestik dan import, menunjuk impak positif yang signifikan daripada komponen eksport ke atas permintaan domestik dan eksport bersih. Kajian juga menunjukkan impak positif komponen eksport terhadap sektor perkhidmatan. Implikasi polisi yang disimpulkan ialah kedua-dua komponen import dan eksport mempunyai pengaruh yang ketara dalam permintaan domestik, eksport bersih dan perkhidmatan. Komponen ini mendapat manfaat daripada integrasi ASEAN-5 dan dari dasar negara masing-masing. Pihak berkuasa perlu merancang dasar mereka dengan mengambil kira kesan komponen dan integrasi serantau untuk memastikan mereka mendapat manfaat dengan cara yang lebih berkesan dan efisien.

**Kata kunci:** ASEAN-5, ARDL, Kointegrasi Panel Pedroni, komponen import, komponen eksport

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# LIST OF ABBREVIATIONS

| | |
|---|---|
| ADF | Augmented Dickey-Fuller |
| AFC | Asian Financial Crisis |
| ARDL | Autroregressive Distributive Lag |
| C | Consumption |
| DD | Domestic Demand |
| DDLGS | Domestic Demand-Led Growth Strategy |
| ECM | Error Correction Model |
| ECT | Error Correction Term |
| ELGS | Export-Led Growth Strategy |
| G | Government |
| GDP | Gross Domestic Product |
| GNP | Gross National Product |
| GFC | Global Financial Crisis |
| GFCF | Gross Fixed Capital Formation |
| GLES | Growth-Led Export Strategy |
| I | Investment |
| ILG | Import-Led Growth Strategy |
| IO | Input-Output |
| ISS | Import-Substitution Strategy |
| M | Imports |

| | |
|---|---|
| MCAP | Capital Imports |
| MCONS | Consumption Imports |
| NX | Net Exports |
| PP | Phillips-Perron |
| PUC | Public Consumption |
| PVC | Private Consumption |
| S | Services |
| SB | Structural Break |
| TB | Break-date |
| X | Exports |
| XCAP | Capital Exports |
| XINT | Intermediate Exports |
| XCONS | Consumption Exports |
| ZA | Zivot-Andrews |

# CHAPTER ONE

# INTRODUCTION

## 1.1 Introduction

This chapter offers the overall outline of the thesis. The background of this thesis is outlined in section 1.2. In section 1.3, it deliberates the statement of the problem while the research questions are shown in section 1.4. Section 1.5 covers the objectives of this study. The significance is set in section 1.6 while sections 1.7 and 1.8 describe the scope of the study and the organization of the thesis.

## 1.2 Background of the Study

Export-led growth strategy (henceforth known as *ELGS*) gained eminence in the late 1970s, concentrating on developing the productive capacity of the country via penetrating into overseas markets by taking advantage of the benefits of the openness of the economy. This strategy replaced import-substitution strategy (hereafter identified as *ISS*) which played a vital role in developing and driving gross domestic product (henceforth known as *GDP*) especially post World War II for about three decades. Although the *ELGS* grew dominance, scholars outlined three different perceptions in relation to this strategy. The first group emphasis is on 'Hecksher-Ohlin-Samuelson' theory of comparative advantage. This theory basically highlights on the gains from global trade between countries with different capital-labour ratios (Ohlin 1933; Samuelson 1948; Dornbusch 1980).

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# APPENDICES

## Appendix A

## Appendix A-1

Table 2.1

*Illustrative Input-Output Approach*

|  | Economic sector | Final Demand | Total |
|---|---|---|---|
| Economic Sector | Z | Y | x |
| Primary Inputs | W | V | U |
| Total | A | B | |

Note: Z: intermediate supplies; W: primary inputs; A: total economic sector; Y: final demand for economic sector; V: final demand for primary inputs; B: total final demand; x: total economic sector; U: total primary inputs

## Appendix B

## Appendix B-1

Table 4.2A
*Indonesia: ADF Test for Unit Root*

| | Level | | 1st Difference | |
|---|---|---|---|---|
| | Constant | Constant +Trend | Constant | Constant +Trend |
| *lnPvC* | -1.4063 | -2.2552 | -4.0270* | -4.0172** |
| | (0.5629)[0] | (0.4411)[0] | (0.0052)[0] | (0.0221)[0] |
| *lnPuC* | 0.7945 | -1.3138 | -3.3751** | -3.5700*** |
| | (0.9918)[0] | (0.8607)[0] | (0.0224)[0] | (0.0543)[0] |
| *lnGFCF* | -0.4988 | -2.3491 | -4.0446* | -3.9873** |
| | (0.8757)[0] | (0.3942)[1] | (0.0052)[1] | (0.0243)[1] |
| *lnX* | -1.3614 | -3.0181 | -6.4391* | -6.3448* |
| | (0.5884)[0] | (0.1472)[0] | (0.0000)[0] | (0.0001)[0] |
| *lnM* | -1.3722 | -2.3927 | -4.8621* | -4.7669* |
| | (0.5792)[0] | (0.3740)[0] | (0.0007)[0] | (0.0045)[0] |
| *lnS* | 0.0631 | -1.3037 | -4.4406* | -4.4518* |
| | (0.9560)[0] | (0.8634)[0] | (0.0020)[0] | (0.0088)[0] |
| *lnMCONS* | -0.5936 | -2.3807 | -5.1787* | -5.0633* |
| | (0.8551)[0] | (0.3796)[0] | (0.0003)[0] | (0.0023)[0] |
| *lnMINT* | -0.6687 | -1.9432 | -5.8848* | -5.8072* |
| | (0.8371)[0] | (0.6024)[0] | (0.0001)[0] | (0.0004)[0] |
| *lnMCAP* | -1.1232 | -1.696 | -5.1814* | -5.1683* |
| | (0.6901)[0] | (0.7228)[0] | (0.0003)[0] | (0.0018)[0] |
| *lnXCONS* | -0.3822 | -2.5210 | -5.3450* | -5.2245* |
| | (0.8979)[0] | (0.3161)[0] | (0.0002)[0] | (0.0016)[0] |
| *lnXINT* | -1.0058 | -2.5518 | -5.1922* | -4.999* |
| | (0.7351)[0] | (0.3030)[0] | (0.0003)[0] | (0.0027)[0] |
| *lnXCAP* | -7.4233* | -6.3826* | -4.2633* | -5.5435* |
| | (0.0000)[1] | (0.0001)[1] | (0.0030)[0] | (0.0008)[0] |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.2B
Malaysia: ADF Test for Unit Root

| | Level | | 1st Difference | |
| | Constant | Constant +Trend | Constant | Constant +Trend |
|---|---|---|---|---|
| *lnPvC* | 0.1166 | -1.7632 | -4.0171* | -4.0487** |
| | (0.9606)[0] | (0.6919)[0] | (0.0053)[0] | (0.0214)[1] |
| *lnPuC* | -0.3903 | -3.1063 | -6.6443* | -6.4978* |
| | (0.8965)[0] | (0.1292)[3] | (0.0000)[0] | (0.0001)[0] |
| *lnGFCF* | -1.5365 | -2.2164 | -4.2190* | -3.5075*** |
| | (0.4991)[0] | (0.4608)[0] | (0.0033)[0] | (0.0622)[1] |
| *lnX* | -3.8713* | -1.6558 | -3.6740** | -4.8786* |
| | (0.0071)[0] | (0.7405)[0] | (0.0115)[0] | (0.0035)[0] |
| *lnM* | -2.5390 | -2.8276 | -4.7890* | -5.0278* |
| | (0.1188)[0] | (0.2012)[0] | (0.0009)[0] | (0.0025)[0] |
| *lnS* | -2.3117 | -3.4268*** | -3.6544** | -3.7230** |
| | (0.1762)[0] | (0.0704)[0] | (0.0121)[0] | (0.0402)[0] |
| *lnMCONS* | -0.1357 | -2.1441 | -5.4924* | -5.4954* |
| | (0.9348)[0] | (0.4980)[0] | (0.0002)[0] | (0.0009)[0] |
| *lnMINT* | -0.7393 | -2.7092 | -5.5243* | -5.4017* |
| | (0.8187)[0] | (0.2414)[0] | (0.0002)[0] | (0.0011)[0] |
| *lnMCAP* | -3.4558** | -2.9010 | -4.7584* | -5.1496* |
| | (0.0183)[0] | (0.1788)[0] | (0.0009)[0] | (0.0019)[0] |
| *lnXCONS* | -2.0333 | -2.8991 | -4.9100* | *-5.1242 |
| | (0.2716)[0] | (0.1794)[0] | (0.0006)[0] | (0.0006)[0] |
| *lnXINT* | -1.2640 | -2.5007 | -4.5318* | -4.6307* |
| | (0.6297)[0] | (0.3249)[0] | (0.0016)[0] | (0.0060)[0] |
| *lnXCAP* | -4.0651* | -2.5366 | -3.9357* | -4.5603* |
| | (0.0045)[0] | (0.3094)[0] | (0.0064)[0] | (0.0070)[0] |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.2C
*Philippines: ADF Test for Unit Root*

| | Level | | 1st Difference | |
|---|---|---|---|---|
| | Constant | Constant +Trend | Constant | Constant +Trend |
| *lnPvC* | 1.0188 | -4.3707** | -3.2182** | -3.1400 |
| | (0.9947)[1] | (0.0182)[4] | (0.0406)[4] | (0.1355)[4] |
| *lnPuC* | -0.6100 | -4.2646** | -2.2732 | -0.9983 |
| | (0.8406)[4] | (0.0201)[3] | (0.1918)[3] | (0.9130)[3] |
| *lnGFCF* | 3.4735 | -0.5809 | -0.7625 | -6.5231* |
| | (1.0000)[2] | (0.9663)[2] | (0.8006)[3] | (0.0003)[1] |
| *lnX* | 0.4757 | -3.7671** | -6.6950* | -6.8747* |
| | (0.9805)[1] | (0.0422)[0] | (0.0000)[0] | (0.0002)[0] |
| *lnM* | 1.1800 | -2.9852 | -6.0979* | -6.6816* |
| | (0.9965)[1] | (0.1611)[0] | (0.0001)[0] | (0.0002)[0] |
| *lnS* | 2.3542 | -1.7674 | -3.0335*** | -4.1166** |
| | (0.9999)[0] | (0.6800)[0] | (0.0506)[0] | (0.0232)[0] |
| *lnMCONS* | 0.3163 | -2.6756 | -4.6534* | -4.6737* |
| | (0.9723)[1] | (0.2579)[4] | (0.0020)[0] | (0.0083)[0] |
| *lnMINT* | -0.1723 | -2.9629 | -4.4891* | -4.8507* |
| | (0.9269)[0] | (0.1669)[0] | (0.0028)[0] | (0.0060)[0] |
| *lnMCAP* | -3.7029** | -3.5168*** | -6.1709* | -5.9286* |
| | (0.0161)[4] | (0.0741)[4] | (0.0001)[0] | (0.0008)[0] |
| *lnXCONS* | -0.2167 | -2.3076 | -3.0913** | -2.9949 |
| | (0.9207)[0] | (0.4071)[3] | (0.0454)[0] | (0.1600)[0] |
| *lnXINT* | -0.5748 | -2.6230 | -4.1519* | -4.0839** |
| | (0.8546)[0] | (0.2750)[0] | (0.0055)[0] | (0.0246)[0] |
| *lnXCAP* | -3.2873** | -2.9117 | -3.3599** | -3.1699 |
| | (0.0303)[0] | (0.1806)[0] | (0.0270)[0] | (0.1212)[0] |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.2D
*Singapore: ADF Test for Unit Root*

| | Level | | 1st Difference | |
| --- | --- | --- | --- | --- |
| | Constant | Constant +Trend | Constant | Constant +Trend |
| *lnPvC* | -2.3802 | -1.3890 | -3.9874* | -4.9963* |
| | (0.1570)[0] | (0.8391)[0] | (0.0057)[0] | (0.0029)[1] |
| *lnPuC* | -2.0477 | -0.9709 | -5.1938* | -5.9972* |
| | (0.2660)[0] | (0.9304)[0] | (0.0003)[0] | (0.0003)[0] |
| *lnGFCF* | -1.4155 | -4.8067* | -2.3317 | -2.2656 |
| | (0.5577)[1] | (0.0050)[4] | (0.1724)[4] | (0.4317)[4] |
| *lnX* | -2.1563 | -1.1693 | -3.8510* | -4.4127* |
| | (0.2260)[0] | (0.8952)[0] | (0.0077)[0] | (0.0096)[0] |
| *lnM* | -1.9267 | -1.4839 | -4.7088* | -5.2933* |
| | (0.3154)[0] | (0.8080)[0] | (0.0010)[0] | (0.0014)[0] |
| *lnS* | -1.6482 | -2.3782 | -3.8954* | -4.3722** |
| | (0.4442)[0] | (0.3809)[0] | (0.0073)[1] | (0.0110)[1] |
| *lnMCONS* | -0.8510 | -1.7704 | -4.6626* | -4.5940* |
| | (0.7866)[0] | (0.6885)[0] | (0.0012)[0] | (0.0065)[0] |
| *lnMINT* | -0.5810 | -1.7397 | -4.4303* | -4.3340** |
| | (0.8580)[0] | (0.7029)[0] | (0.0020)[0] | (0.0114)[0] |
| *lnMCAP* | -2.6380*** | -1.5978 | -3.8752* | -4.6196* |
| | (0.0990)[0] | (0.7648)[0] | (0.0073)[0] | (0.0061)[0] |
| *lnXCONS* | -0.5236 | -1.6935 | -4.1005* | -3.9393** |
| | (0.8706)[0] | (0.7239)[0] | (0.0044)[0] | (0.0260)[0] |
| *lnXINT* | -0.7960 | -1.9761 | -3.4391** | -3.4507** |
| | (0.8029)[0] | (0.5843)[1] | (0.0194)[0] | (0.0682)[0] |
| *lnXCAP* | -3.0604** | -1.4281 | -3.3961** | -4.4225* |
| | (0.0429)[0] | (0.8269)[0] | (0.0214)[0] | (0.0094)[0] |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.
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Table 4.2E
*Thailand: ADF Test for Unit Root*

| | Level | | 1st Difference | |
|---|---|---|---|---|
| | Constant | Constant +Trend | Constant | Constant +Trend |
| *lnPvC* | -1.8271 | -3.4351*** | -3.1070** | -3.2014 |
| | (0.3594)[0] | (0.0702)[1] | (0.0395)[0] | (0.1077)[0] |
| *lnPuC* | -0.8190 | -3.7826** | -4.1948* | -4.1541** |
| | (0.7962)[0] | (0.0375)[3] | (0.0035)[0] | (0.0166)[0] |
| *lnGFCF* | -2.4153 | -2.5004 | -3.0098** | -2.9625 |
| | (0.1483)[1] | (0.3249)[1] | (0.0482)[0] | (0.1623)[0] |
| *lnX* | -2.5661 | -1.7639 | -4.7775* | -5.5838* |
| | (0.1131)[0] | (0.6916)[0] | (0.0009)[0] | (0.0007)[0] |
| *lnM* | -1.3873 | -2.3711 | -4.3356* | -4.3102** |
| | (0.5721)[0] | (0.3842)[0] | (0.0025)[0] | (0.0120)[0] |
| *lnS* | -0.9245 | -3.5580*** | -2.8621*** | -3.0221* |
| | (0.7632)[0] | (0.0555)[1] | (0.0648)[0] | (0.1478)[1] |
| *lnMCONS* | -0.7446 | -2.1265 | -3.9831* | -3.8883** |
| | (0.8173)[0] | (0.5071)[0] | (0.0057)[0] | (0.0288)[0] |
| *lnMINT* | -1.0984 | -2.4179 | -5.3091* | -5.2003* |
| | (0.7000)[0] | (0.3622)[0] | (0.0003)[0] | (0.0017)[0] |
| *lnMCAP* | -1.4507 | -3.8539** | -3.9933* | -3.9984** |
| | (0.5413)[0] | (0.0309)[1] | (0.0056)[0] | (0.0230)[0] |
| *lnXCONS* | -1.4941 | -2.4827 | -6.2192* | -6.3208* |
| | (0.5200)[0] | (0.3328)[0] | (0.0000)[0] | (0.0001)[0] |
| *lnXINT* | -1.9981 | 0.2338 | -3.4298** | -3.9959** |
| | (0.2857)[0] | (0.9969)[0] | (0.0198)[0] | (0.0231)[0] |
| *lnXCAP* | -4.6056* | -1.8139 | -3.5846** | -5.3399* |
| | (0.0013)[0] | (0.6675)[0] | (0.0141)[0] | (0.0013)[0] |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.
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Table 4.2F
*Indonesia: PP Test for Unit Root*

| | Level | | 1st Difference | |
|---|---|---|---|---|
| | Constant | Constant +Trend | Constant | Constant +Trend |
| *lnPvC* | -1.2906 | -2.3273 | -4.0793* | -4.0775** |
| | (0.6176)[2] | (0.4054)[2] | (0.0046)[2] | (0.0195)[2] |
| *lnPuC* | 0.6043 | -1.4149 | -3.3751** | -3.5724*** |
| | (0.9869)[1] | (0.8311)[1] | (0.0224)[0] | (0.0540)[1] |
| *lnGFCF* | -0.6509 | -1.5887 | -3.3685** | -3.3167*** |
| | (0.8415)[1] | (0.7685)[0] | (0.0227)[6] | (0.0875)[6] |
| *lnX* | -1.3998 | -3.0016 | -6.6082* | -6.4866* |
| | (0.5661)[2] | (0.1514)[1] | (0.0000)[2] | (0.0001)[2] |
| *lnM* | -1.3564 | -2.3927 | -4.8741* | -4.7701* |
| | (0.5868)[2] | (0.3740)[0] | (0.0007)[3] | (0.0044)[3] |
| *lnS* | -0.0104 | -1.5294 | -4.4500* | -4.4518* |
| | (0.9490)[2] | (0.7915)[2] | (0.0019)[1] | (0.0088)[0] |
| *lnMCONS* | -0.5523 | -2.4545 | -5.1776* | -5.0627* |
| | (0.8644)[2] | (0.3455)[1] | (0.0003)[1] | (0.0023)[1] |
| *lnMINT* | -0.5606 | -1.8905 | -5.9404* | -5.8462* |
| | (0.8626)[4] | (0.6293)[1] | (0.0001)[3] | (0.0004)[4] |
| *lnMCAP* | -1.0576 | -1.7090 | -5.2171* | -5.2201* |
| | (0.7159)[2] | (0.7170)[1] | (0.0003)[3] | (0.0016)[4] |
| *lnXCONS* | -0.3374 | -2.6188 | -5.4692* | -5.4398* |
| | (0.9056)[1] | (0.2756)[1] | (0.0002)[3] | (0.0010)[4] |
| *lnXINT* | -1.0059 | -2.6077 | -5.2036* | -5.0045* |
| | (0.7351)[0] | (0.2801)[1] | (0.0003)[1] | (0.0027)[1] |
| *lnXCAP* | -9.2810* | -6.2194* | -4.2601* | -5.5208* |
| | (0.0000)[1] | (0.0002)[1] | (0.0030)[3] | (0.0008)[2] |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

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Table 4.2G
*Malaysia: PP Test for Unit Root*

| | Level | | 1st Difference | |
|---|---|---|---|---|
| | Constant | Constant +Trend | Constant | Constant +Trend |
| *lnPvC* | 0.1526 | -1.9591 | -3.9647* | -3.9690** |
| | (0.9635)[3] | (0.5943)[1] | (0.0060)[6] | (0.0244)[6] |
| *lnPuC* | -0.3814 | -2.4808 | -6.4252* | -6.3005* |
| | (0.8981)[2] | (0.3337)[3] | (0.0000)[2] | (0.0002)[2] |
| *lnGFCF* | -1.5365 | -2.2164 | -4.1915* | -4.0618** |
| | (0.4991)[0] | (0.4608)[0] | (0.0035)[4] | (0.0202)[4] |
| *lnX* | -10.4717* | -1.8442 | -3.6563** | -5.8561 |
| | (0.0000)[10] | (0.6526)[8] | (0.0120)[1] | (0.0004)[7] |
| *lnM* | -3.2027** | -2.8622 | -4.7990* | -5.3036* |
| | (0.0318)[5] | (0.1904)[4] | (0.0008)[2] | (0.0014)[4] |
| *lnS* | -2.0633 | -3.4268*** | -3.6081** | -3.6679** |
| | (0.2600)[2] | (0.0704)[0] | (0.0134)[3] | (0.0448)[2] |
| *lnMCONS* | 0.1469 | -2.1441 | -5.6455* | -6.0399* |
| | (0.9630)[4] | (0.4980)[0] | (0.0001)[3] | (0.0003)[4] |
| *lnMINT* | -0.5699 | -2.7625 | -6.0586* | -5.9221* |
| | (0.8605)[6] | (0.2226)[1] | (0.0000)[5] | (0.0003)[5] |
| *lnMCAP* | -6.6182* | -4.0165** | -4.7770* | -5.7175* |
| | (0.0000)[15] | (0.0215)[9] | (0.0009)[2] | (0.0005)[5] |
| *lnXCONS* | -2.2459 | -2.8530 | -4.9260* | -5.1800* |
| | (0.1962)[5] | (0.1932)[2] | (0.0006)[4] | (0.0018)[4] |
| *lnXINT* | -1.3169 | -2.5437 | -4.5256* | -4.6269* |
| | (0.6054)[3] | (0.3064)[1] | (0.0016)[2] | (0.0061)[2] |
| *lnXCAP* | -11.189* | -3.6053** | -3.9059* | -4.5537* |
| | (0.0000)[16] | (0.0498)[11] | (0.0068)[2] | (0.0071)[5] |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

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Table 4.2H
*Philippines: PP Test for Unit Root*

| | Level | | 1st Difference | |
|---|---|---|---|---|
| | Constant | Constant +Trend | Constant | Constant +Trend |
| *lnPvC* | 0.9636 | -1.3443 | -2.1320 | -2.3500 |
| | (0.9941)[1] | (0.8438)[1] | (0.2355)[2] | (0.3897)[2] |
| *lnPuC* | 1.9240 | -0.7523 | -3.0581** | -5.4346* |
| | (0.9995)[2] | (0.9527)[18] | (0.0484)[0] | (0.0020)[7] |
| *lnGFCF* | 4.4960 | 0.7943 | -4.7241* | -12.3846* |
| | (1.0000)[11] | (0.9993)[18] | (0.0017)[1] | (0.0000)[8] |
| *lnX* | 0.4646 | -3.7343** | -7.0877* | -7.4845* |
| | (0.9804)[17] | (0.0448)[3] | (0.0000)[4] | (0.0001)[5] |
| *lnM* | 1.5866 | -2.8958 | -6.0142* | -6.5713* |
| | (0.9988)[8] | (0.1851)[1] | (0.0001)[1] | (0.0000)[1] |
| *lnS* | 2.3542 | -1.7531 | -3.0335** | -4.1166** |
| | (0.9999)[0] | (0.6867)[1] | (0.0506)[0] | (0.0232)[0] |
| *lnMCONS* | 0.4086 | -3.6966** | -4.7021* | -4.6879* |
| | (0.9777)[2] | (0.0480)[1] | (0.0018)[1] | (0.0080)[1] |
| *lnMINT* | 0.0662 | -2.9150 | -4.6591* | -5.1610* |
| | (0.9539)[4] | (0.1797)[4] | (0.0020)[5] | (0.0034)[5] |
| *lnMCAP* | -2.2669 | -2.2179 | -6.0021* | -5.7914* |
| | (0.1916)[2] | (0.4540)[2] | (0.0001)[2] | (0.0011)[2] |
| *lnXCONS* | -0.2167 | -2.1357 | -2.9519** | -2.7814 |
| | (0.9207)[0] | (0.4951)[0] | (0.0590)[3] | (0.2205)[3] |
| *lnXINT* | -0.5748 | -2.5898 | -4.1514* | -4.0841** |
| | (0.8546)[0] | (0.2877)[2] | (0.0055)[1] | (0.0246)[1] |
| *lnXCAP* | -3.1996** | -2.8737 | -3.3599** | -3.1699 |
| | (0.0360)[1] | (0.1914)[1] | (0.0270)[0] | (0.1212)[0] |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.2I
*Singapore: PP Test for Unit Root*

| | Level | | 1st Difference | |
|---|---|---|---|---|
| | Constant | Constant +Trend | Constant | Constant +Trend |
| *lnPvC* | -7.5181* | -0.9469 | -3.8921* | -7.9927* |
| | (0.0000)[21] | (0.9339)[9] | (0.0070)[5] | (0.0000)[17] |
| *lnPuC* | -2.6045 | -0.7057 | -5.1938* | -6.2092* |
| | (0.1054)[5] | (0.9615)[3] | (0.0003)[0] | (0.0002)[3] |
| *lnGFCF* | -1.8466 | -2.1294 | -2.9498*** | -3.0118 |
| | (0.3506)[1] | (0.5056)[1] | (0.0544)[5] | (0.1495)[4] |
| *lnX* | -2.1667 | -1.2637 | -3.8510* | -4.3952* |
| | (0.2224)[2] | (0.8736)[1] | (0.0077)[0] | (0.0100)[2] |
| *lnM* | -2.2165 | -1.4503 | -4.7088* | -5.3385* |
| | (0.2057)[3] | (0.8196)[1] | (0.0010)[0] | (0.0013)[2] |
| *lnS* | -2.6711*** | -2.0788 | -4.5509* | -4.9571* |
| | (0.0930)[10] | (0.5320)[6] | (0.0015)[4] | (0.0029)[6] |
| *lnMCONS* | -0.8544 | -1.7704 | -4.6605* | -4.5885* |
| | (0.7856)[2] | (0.6885)[0] | (0.0012)[1] | (0.0066)[1] |
| *lnMINT* | -0.6016 | -1.9803 | -4.4298* | -4.3325** |
| | (0.8533)[1] | (0.5833)[2] | (0.0020)[1] | (0.0114)[1] |
| *lnMCAP* | -2.9033*** | -1.5687 | -3.8752* | -4.6088* |
| | (0.0591)[3] | (0.7764)[2] | (0.0073)[0] | (0.0063)[2] |
| *lnXCONS* | -0.5236 | -1.7819 | -4.1005* | -3.9393** |
| | (0.8706)[0] | (0.6830)[1] | (0.0044)[0] | (0.0260)[0] |
| *lnXINT* | -0.7861 | -1.6939 | -3.4391** | -3.4507*** |
| | (0.8058)[1] | (0.7237)[2] | (0.0194)[0] | (0.0682)[0] |
| *lnXCAP* | -3.3238** | -1.4162 | -3.3961** | -4.4089* |
| | (0.0245)[3] | (0.8307)[2] | (0.0214)[0] | (0.0097)[2] |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.
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Table 4.2J
*Thailand: PP Test for Unit Root*

| | Level | | 1st Difference | |
|---|---|---|---|---|
| | Constant | Constant +Trend | Constant | Constant +Trend |
| *lnPvC* | -1.6829 | -2.2506 | -3.1070** | -3.2014 |
| | (0.4273)[1] | (0.4434)[1] | (0.0395)[0] | (0.1077)[0] |
| *lnPuC* | -0.7542 | -1.8753 | -4.2684* | -4.2366** |
| | (0.8147)[2] | (0.6370)[2] | (0.0029)[2] | (0.0140)[2] |
| *lnGFCF* | -1.8056 | -1.8399 | -3.0202** | -2.9634 |
| | (0.3692)[2] | (0.6548)[2] | (0.0472)[2] | (0.1621)[2] |
| *lnX* | -4.186* | -1.5479 | -4.7814* | -7.0895* |
| | (0.0034)[7] | (0.7845)[3] | (0.0009)[2] | (0.0000)[6] |
| *lnM* | -1.3876 | -2.3711 | -4.3051* | -4.2730** |
| | (0.5719)[2] | (0.3842)[0] | (0.0027)[3] | (0.0129)[3] |
| *lnS* | -0.8773 | -2.3749 | -2.8782*** | -2.8317 |
| | (0.7784)[2] | (0.3824)[2] | (0.0628)[2] | (0.2004)[2] |
| *lnMCONS* | -0.7604 | -2.4013 | -3.9831** | -3.8883** |
| | (0.8130)[1] | (0.3700)[2] | (0.0057)[0] | (0.0288)[0] |
| *lnMINT* | -1.0193 | -2.4884 | -5.5316* | -5.3848* |
| | (0.7302)[4] | (0.3303)[1] | (0.0001)[4] | (0.0011)[4] |
| *lnMCAP* | -1.4493 | -2.6981 | -3.9716* | -3.9701** |
| | (0.5420)[2] | (0.2454)[1] | (0.0059)[2] | (0.0244)[2] |
| *lnXCONS* | -1.7627 | -2.4827 | -6.4009* | -6.6563* |
| | (0.3892)[6] | (0.3328)[0] | (0.0000)[3] | (0.0001)[4] |
| *lnXINT* | -1.9878 | 0.7130 | -3.3998** | -3.8860** |
| | (0.2899)[2] | (0.9993)[5] | (0.0212)[3] | (0.0290)[6] |
| *lnXCAP* | -10.337* | -2.4704 | -3.5337** | -5.9036* |
| | (0.0000)[8] | (0.3383)[7] | (0.0158)[1] | (0.0004)[4] |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

## Appendix B-2

Table 4.3A
*Indonesia: Serial Correlation*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 2.0528 | 0.1747 | 0.4096 | 0.6722 |
| *PuC* | 0.6961 | 0.5305 | 6.1623 | 0.1206 |
| *GFCF* | 1.0693 | 0.3716 | 3.7439 | 0.2108 |
| *X* | 2.5272 | 0.1214 | 1.4801 | 0.2914 |
| *S* | 0.8032 | 0.4776 | 0.6445 | 0.5851 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3B
*Malaysia: Serial Correlation*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 0.1929 | 0.8271 | 0.3023 | 0.7432 |
| *PuC* | 2.0667 | 0.2217 | 0.4079 | 0.6781 |
| *GFCF* | 0.5337 | 0.5959 | 2.4892 | 0.1526 |
| *X* | 1.1763 | 0.3965 | 2.5413 | 0.2261 |
| *S* | 1.4836 | 0.2547 | 0.6696 | 0.5989 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3C
*Philippines: Serial Correlation*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 2.7938 | 0.1533 | 2.4638 | 0.1467 |
| *PuC* | 4.8391 | 0.0419** | 0.1671 | 0.8658 |
| *GFCF* | 2.3226 | 0.1602 | 3.3486 | 0.1154 |
| *X* | 1.2467 | 0.3251 | 0.2836 | 0.7584 |
| *S* | 3.2139 | 0.1795 | 3.7091 | 0.1545 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3D
*Singapore: Serial Correlation*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 0.1289 | 0.8812 | 1.2199 | 0.3357 |
| *PuC* | 1.2137 | 0.4517 | 0.4828 | 0.6585 |
| *GFCF* | 2.0087 | 0.4464 | 0.8964 | 0.4265 |
| *X* | 1.8515 | 0.2502 | 0.4472 | 0.6489 |
| *S* | 1.0763 | 0.3773 | 1.8025 | 0.2068 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3E
*Thailand: Serial Correlation*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 1.2111 | 0.3422 | 0.9782 | 0.4043 |
| *PuC* | 1.8747 | 0.8471 | 6.1623 | 0.1206 |
| *GFCF* | 0.6857 | 0.5189 | 2.5287 | 0.1181 |
| *X* | 3.7765 | 0.1519 | 1.4916 | 0.2531 |
| *S* | 1.3497 | 0.2991 | 1.3191 | 0.3035 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3F
*Indonesia: Homoscedasticity*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 1.6623 | 0.1995 | 1.0248 | 0.4648 |
| *PuC* | 0.8304 | 0.6313 | 0.6275 | 0.7742 |
| *GFCF* | 1.2884 | 0.3202 | 2.6497 | 0.1782 |
| *X* | 0.7838 | 0.6354 | 0.7346 | 0.7082 |
| *S* | 0.3382 | 0.9427 | 0.3945 | 0.9313 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3G

*Malaysia: Homoscedasticity*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 0.4424 | 0.8759 | 1.336 | 0.2917 |
| *PuC* | 1.0443 | 0.5057 | 0.2843 | 0.9815 |
| *GFCF* | 0.6637 | 0.6554 | 0.5776 | 0.8216 |
| *X* | 0.7919 | 0.6727 | 0.3848 | 0.9367 |
| *S* | 1.8292 | 0.1552 | 0.2282 | 0.9880 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3H

*Philippines: Homoscedasticity*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| PVC | 0.5734 | 0.7951 | 2.0177 | 0.1478 |
| PUC | 1.1087 | 0.4305 | 2.4653 | 0.2485 |
| GFCF | 0.9884 | 0.4967 | 1.2914 | 0.3537 |
| X | 1.5685 | 0.2370 | 0.9522 | 0.4807 |
| S | 0.7689 | 0.6559 | 1.8227 | 0.2634 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3I

*Singapore: Homoscedasticity*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 0.7237 | 0.6144 | 0.3302 | 0.9556 |
| *PuC* | 1.4967 | 0.3776 | 0.5009 | 0.8691 |
| *GFCF* | 0.3141 | 0.9511 | 1.2378 | 0.3305 |
| *X* | 0.5394 | 0.8506 | 0.9047 | 0.5378 |
| *S* | 0.8043 | 0.6299 | 0.8407 | 0.5834 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3J
*Thailand: Homoscedasticity*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 1.7351 | 0.1923 | 3.3855 | 0.1204 |
| *PuC* | 0.3401 | 0.9569 | 0.6275 | 0.7746 |
| *GFCF* | 1.6202 | 0.2023 | 1.6111 | 0.2071 |
| *X* | 1.1236 | 0.4894 | 1.9544 | 0.1323 |
| *S* | 0.2334 | 0.9773 | 2.9119 | 0.1386 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3K
*Indonesia: Stability Test*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 0.5916 | 0.4567 | 0.4331 | 0.5212 |
| *PuC* | 0.0047* | 0.9468 | 0.0306 | 0.8646 |
| *GFCF* | 0.0532** | 0.8209 | 1.2053 | 0.3525 |
| *X* | 1.7835 | 0.2046 | 2.3996 | 0.1645 |
| *S* | 1.4321 | 0.2593 | 0.1149 | 0.7517 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3L
*Malaysia: Stability Test*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 0.1397 | 0.7147 | 7.1598 | 0.0154* |
| *PuC* | 0.0069 | 0.9364 | 0.0436 | 0.8393 |
| *GFCF* | 0.0637 | 0.8036 | 0.0157 | 0.9035 |
| *X* | 4.4444 | 0.0888*** | 0.6138 | 0.4771 |
| *S* | 0.8763 | 0.3617 | 10.2448 | 0.0493 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3M
*Philippines: Stability Test*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 0.1539 | 0.7084 | 0.2785 | 0.6104 |
| *PuC* | 0.2381 | 0.6372 | 0.0117 | 0.9236 |
| *GFCF* | 0.8541 | 0.3795 | 0.4368 | 0.5272 |
| *X* | 0.2229 | 0.6453 | 0.3969 | 0.5405 |
| *S* | 0.7299 | 0.4411 | 0.0064 | 0.9403 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3N
*Singapore: Stability Test*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 0.7614 | 0.3944 | 0.4314 | 0.5248 |
| *PuC* | 0.0515 | 0.8351 | 0.2614 | 0.6361 |
| *GFCF* | 0.2309 | 0.6783 | 1.5271 | 0.2325 |
| *X* | 0.4744 | 0.5167 | 1.3581 | 0.2647 |
| *S* | 1.6727 | 0.2224 | 5.6621 | 0.0333** |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3O
*Thailand: Stability Test*

|  | MCAP, MINT & MCONS | | XCAP,XINT & XCONS | |
|---|---|---|---|---|
|  | Coeff | Prob. | Coeff | Prob. |
| *PvC* | 3.0712 | 0.1102 | 0.0414 | 0.8428 |
| *PuC* | 0.0043 | 0.9513 | 0.0306 | 0.8646 |
| *GFCF* | 1.1666 | 0.2961 | 0.1161 | 0.7383 |
| *X* | 0.0011 | 0.9752 | 1.5123 | 0.2346 |
| *S* | 3.0081 | 0.1084 | 0.0478 | 0.8304 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.3P
*Lag Length for Import Components Model*

| Imports | Indonesia | Malaysia | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|
| *PvC* | 4,0,0,0,0 | 3,0,0,0,1 | 1,0,2,1,2 | 1,0,0,0,0 | 5,0,0,0,0 |
| *PuC* | 1,2,0,3,3 | 3,2,2,2,2 | 1,1,0,1,1 | 3,3,2,3,3 | 1,3,3,3,3 |
| *GFCF* | 3,0,0,0,0 | 1,0,0,0,0 | 2,0,0,0,2 | 4,3,2,3,2 | 2,0,0,0,0 |
| *X* | 1,1,1,0,2 | 3,1,2,3,3 | 1,0,0,0,0 | 3,2,2,2,2 | 4,2,2,2,2 |
| *S* | 5,0,0,0,0 | 1,0,0,0,0 | 5,0,0,0,0 | 3,0,1,2,0 | 4,0,0,0,0 |

Source: Author

Table 4.3Q
*Lag Length for Export Component Models*

| Exports | Indonesia | Malaysia | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|
| *PvC* | 1,1,1,1,1 | 1,0,0,0,0 | 1,1,1,0,1 | 3,1,0,0,2 | 2,1,2,0,0 |
| *PuC* | 3,0,3,0,1 | 1,2,2,2,2 | 3,2,1,1,2 | 1,3,3,3,3 | 3,0,3,0,1 |
| *GFCF* | 3,2,3,3,3 | 3,2,1,1,2 | 2,0,0,0,2 | 1,0,0,0,0 | 3,0,0,0,0 |
| *X* | 2,2,2,2,2 | 2,2,3,3,3 | 1,0,0,0,0 | 1,0,0,2,1 | 1,0,0,0,0 |
| *S* | 1,3,3,3,3 | 2,3,3,3,3 | 5,0,0,0,0 | 3,1,0,0,0 | 3,0,0,0,0 |

Source: Author

**Appendix B-3**

Table 4.4
*Result of Zivot-Andrews one-break test based on level and trend*

| Variables | Indonesia Break Year | Malaysia Break Year | Philippines Break Year | Thailand Break Year | Singapore Break Year |
|---|---|---|---|---|---|
| *PvC* | 1998 | 1998 | 2009 | 2003 | 2000 |
| *PuC* | 1998 | 1998 | 2011 | 2009 | 2000 |
| *GFCF* | 1998 | 1998 | 2009 | 1998 | 2012 |
| *X* | 1999 | 1998 | 2009 | 2009 | 2004 |
| *M* | 1999 | 1998 | 2009 | 2004 | 2006 |
| *S* | 1998 | 2003 | 2009 | 1997 | 2010 |

Source: Author

**Appendix B-4**

Table 4.5.1A
*Indonesia: ARDL Bound Test*

| Model (Import Components) | F-Statistics |
|---|---|
| *PvC,MCAP,MINT,MCONS* | 1.6412 |
| *PuC,MCAP,MINT,MCONS* | 7.7351* |
| *GFCF,MCAP,MINT,MCONS* | 0.4462 |
| *X,MCAP,MINT,MCONS* | 2.7183 |
| *S,MCAP,MINT,MCONS* | 0.8510 |
| Model (Export Components) | F-Statistics |
| *PvC,XCAP,XINT,XCONS* | 5.8102* |
| *PuC,XCAP,XINT,XCONS* | 10.725* |
| *GFCF,XCAP,XINT,XCONS* | 7.5861* |
| *M,XCAP,XINT,XCONS* | 2.1830 |
| *S,XCAP,XINT,XCONS* | 15.8649* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1B
*Indonesia: Private Consumption, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (4,0,0,0,0) | *D(PvC(-1))* | 0.1098 | 0.3311 |
|  | *D(PvC(-2))* | 0.3162 | 0.0009* |
|  | *D(PvC(-3))* | 0.0414 | 0.5427 |
|  | *D(MCAP)* | -0.0121 | 0.6096 |
|  | *D(MINT)* | 0.0622 | 0.0944*** |
|  | *D(MCONS)* | -0.0084 | 0.6096 |
|  | *D(SPvC)* | -0.1448 | 0.0001* |
|  | *CointEq(-1)* | -0.0689 | 0.0498** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
|  | *MCAP* | -0.1743 | 0.6110 |
|  | *MINT* | 0.8992 | 0.0859*** |
|  | *MCONS* | -0.1219 | 0.6669 |
|  | *SPvC* | -2.1018 | 0.0631*** |
|  | *C* | 4.1396 | 0.0002* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1C

*Indonesia: Public Consumption, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,2,0,3,3) | D(MCAP) | -0.0636 | 0.3947 |
| | D(MCAP(-1)) | 0.1316 | 0.0282** |
| | D(MINT) | 0.0518 | 0.6561 |
| | D(MCONS) | -0.0757 | 0.2598 |
| | D(MCONS(-1)) | 0.0099 | 0.8390 |
| | D(MCONS(-2)) | -0.1147 | 0.0108* |
| | D(SPuC) | -0.2413 | 0.0001* |
| | D(SPuC(-1)) | -0.0265 | 0.6607 |
| | D(SPuC(-2)) | 0.1532 | 0.0052* |
| | CointEq(-1) | -0.2026 | 0.0829*** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | -0.4755 | 0.2947 |
| | MINT | 0.2555 | 0.6663 |
| | MCONS | 0.5847 | 0.0131** |
| | SPuC | -2.5653 | 0.0181** |
| | C | 3.2841 | 0.0009* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1D

*Indonesia: Gross Fixed Capital Formation, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,0,0,0,0) | D(GFCF(-1)) | 0.2977 | 0.0047* |
| | D(GFCF(-2)) | -0.0422 | 0.7145 |
| | D(MCAP) | 0.0525 | 0.5542 |
| | D(MINT) | 0.2164 | 0.2525 |
| | D(MCONS) | 0.0398 | 0.4544 |
| | D(SGFCF) | -0.3978 | 0.0000* |
| | CointEq(-1) | -0.4342 | 0.0022* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.1212 | 0.5694 |
| | MINT | 0.4982 | 0.2046 |
| | MCONS | 0.0916 | 0.4407 |
| | SGFCF | -0.9163 | 0.0092* |
| | C | 2.8972 | 0.0002* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1E

*Indonesia: Exports, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,1,1,0,2) | D(MCAP) | -0.1423 | 0.0584** |
| | D(MINT) | 0.1132 | 0.2731 |
| | D(MCONS) | 0.3525 | 0.0003* |
| | D(SX) | -0.3213 | 0.0001* |
| | D(SX(-1)) | -0.0749 | 0.0404** |
| | CointEq(-1) | -0.485 | 0.0007* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.2994 | 0.0906*** |
| | MINT | -0.6457 | 0.0918*** |
| | MCONS | 0.7268 | 0.0003* |
| | SX | -0.2503 | 0.1468 |
| | C | 3.9378 | 0.0001* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1F

*Indonesia: Services, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (5,0,0,0,0) | D(S(-1)) | 0.3033 | 0.0011* |
| | D(S(-2)) | 0.0316 | 0.4680 |
| | D(S(-3)) | 0.0251 | 0.6003 |
| | D(S(-4)) | 0.0184 | 0.6965 |
| | D(MCAP) | -0.0174 | 0.5307 |
| | D(MINT) | 0.0247 | 0.5957 |
| | D(MCONS) | 0.0332 | 0.1012*** |
| | D(SS) | -0.2379 | 0.0004* |
| | CointEq(-1) | -0.0703 | 0.0541** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | -0.2469 | 0.5595 |
| | MINT | 0.3518 | 0.5928 |
| | MCONS | 0.4715 | 0.0399** |
| | SS | -3.3828 | 0.0576** |
| | C | 4.1706 | 0.0001* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

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Table 4.5.1G
*Indonesia: Private Consumption, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,1,1,1,1) | D(XCAP) | -0.0736 | 0.0674** |
| | D(XINT) | -0.0321 | 0.6544 |
| | D(XCONS) | 0.0843 | 0.3972 |
| | D(SPvC) | -0.0995 | 0.0012* |
| | CointEq(-1) | -0.1572 | 0.0885*** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | -0.0909 | 0.5025 |
| | XINT | 0.2411 | 0.3990 |
| | XCONS | 0.5072 | -0.1001*** |
| | SPvC | -0.9312 | 0.1304 |
| | C | 3.6792 | 0.0003* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1H
*Indonesia: Public Consumption, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,0,3,0,1) | D(PuC(-1)) | 0.0512 | 0.7762 |
| | D(PuC(-2)) | 0.5685 | 0.0058* |
| | D(XCAP) | 0.0413 | 0.1128 |
| | D(XINT) | -0.3061 | 0.0012* |
| | D(XINT(-1)) | -0.2187 | 0.0245** |
| | D(XINT(-2)) | 0.1761 | 0.0033* |
| | D(XCONS) | 0.2027 | 0.0431** |
| | D(SPuC) | -0.1665 | 0.0001* |
| | CointEq(-1) | -0.3133 | 0.0133* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | 0.1313 | 0.2767 |
| | XINT | 0.1681 | 0.3504 |
| | XCONS | 0.6469 | 0.0019* |
| | SPuC | -1.0019 | 0.0247** |
| | C | 0.6519 | 0.0318** |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

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Table 4.5.1I

*Indonesia: Gross Fixed Capital Formation, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,2,3,3,3) | D(GFCF(-1)) | -0.4298 | 0.2074 |
| | D(GFCF(-2)) | -0.6112 | 0.0383** |
| | D(XCAP) | 0.1173 | 0.3884 |
| | D(XCAP(-1)) | -0.3386 | 0.0195** |
| | D(XINT) | -0.0173 | 0.8972 |
| | D(XINT(-1)) | -0.0167 | 0.9249 |
| | D(XINT(-2)) | 0.2946 | 0.1216 |
| | D(XCONS) | 0.0956 | 0.5738 |
| | D(XCONS(-1)) | -0.2573 | 0.2596 |
| | D(XCONS(-2)) | 0.2543 | 0.1664 |
| | D(SGFCF) | -0.7397 | 0.0005* |
| | D(SGFCF(-1)) | 0.4133 | 0.0393** |
| | D(SGFCF(-2)) | -0.3107 | 0.0547** |
| | CointEq(-1) | -0.5663 | 0.0363** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | -0.0408 | 0.6771 |
| | XINT | 0.2195 | 0.2511 |
| | XCONS | 1.0371 | 0.0115** |
| | SGFCF | 2.0197 | 0.0185* |
| | C | 0.4523 | 0.2581 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1J
*Indonesia: Imports, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (2,2,2,2,2) | *D(M(-1))* | 0.3683 | 0.4513 |
| | *D(XCAP)* | -0.6079 | 0.1013*** |
| | *D(XCAP(-1))* | -0.0572 | 0.8132 |
| | *D(XINT)* | 0.3036 | 0.3929 |
| | *D(XINT(-1))* | -0.4739 | 0.2562 |
| | *D(XCONS)* | 0.5621 | 0.1521 |
| | *D(XCONS(-1))* | 0.4843 | 0.3822 |
| | *D(SM)* | -0.5227 | 0.0343** |
| | *D(SM(-1))* | 0.2004 | 0.2675 |
| | *CointEq(-1)* | -0.4289 | 0.1425 |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | *XCAP* | -0.1953 | 0.5697 |
| | *XINT* | 0.8844 | 0.1316 |
| | *XCONS* | -0.2473 | 0.8029 |
| | *SM* | -0.8025 | 0.5139 |
| | *C* | 3.3008 | 0.1385 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.5.1K
*Indonesia: Imports, Services & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,3,3,3,3) | D(XCAP) | 0.0181 | 0.8427 |
| | D(XCAP(-1)) | 0.1517 | 0.0461** |
| | D(XCAP(-2)) | -0.0429 | 0.3376 |
| | D(XINT) | 0.1008 | 0.2661 |
| | D(XINT(-1)) | -0.1321 | 0.3616 |
| | D(XINT(-2)) | -0.2408 | 0.0709*** |
| | D(XCONS) | 0.1711 | 0.2291 |
| | D(XCONS(-1)) | 0.1285 | 0.3976 |
| | D(XCONS(-2)) | 0.0569 | 0.6001 |
| | D(SS) | -0.2024 | 0.0017* |
| | D(SS(-1)) | 0.1062 | 0.1127 |
| | D(SS(-2)) | 0.2337 | 0.0234** |
| | CointEq(-1) | -0.6261 | 0.0205** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | -0.0031 | 0.9665 |
| | XINT | 0.6145 | 0.0035* |
| | XCONS | 0.3474 | 0.0906*** |
| | SS | -1.1101 | 0.0033* |
| | C | 2.1351 | 0.0001* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

**Appendix B-5**

Table 4.6.1A
*Malaysia: ARDL Bound Test for Cointegration*

| Model (Import Components) | F-Statistics |
|---|---|
| *PvC,MCAP,MINT,MCONS* | 3.7511** |
| *PuC,MCAP,MINT,MCONS* | 2.1765 |
| *GFCF,MCAP,MINT,MCONS* | 1.9655 |
| *X,MCAP,MINT,MCONS* | 7.2813* |
| *S,MCAP,MINT,MCONS* | 2.1143 |
| Model (Export Components) | F-Statistics |
| *PvC,XCAP,XINT,XCONS* | 1.1552 |
| *PuC,XCAP,XINT,XCONS* | 0.2979 |
| *GFCF,XCAP,XINT,XCONS* | 2.3837 |
| *M,XCAP,XINT,XCONS* | 3.5510** |
| *S,XCAP,XINT,XCONS* | 2.2691 |
| 1%        (LB:3.29;UB:4.39); 10%(LB2.20;UB3.09) | 5%(LB:2.56;UB3.49); |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1B
*Malaysia: Private Consumption, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,0,0,0,1) | *D(PvC(-1))* | -0.1433 | 0.2593 |
| | *D(PvC(-2))* | -0.1624 | 0.0468** |
| | *D(MCAP)* | 0.0376 | 0.1374 |
| | *D(MINT)* | 0.1003 | 0.0726*** |
| | *D(MCONS)* | 0.0899 | 0.0749*** |
| | *D(SPvC)* | -0.1071 | 0.0001* |
| | *CointEq(-1)* | -0.2562 | 0.0001* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | *MCAP* | 0.1468 | 0.1159 |
| | *MINT* | 0.3917 | 0.0913*** |
| | *MCONS* | 0.3511 | 0.0337** |
| | *SPvC* | -0.6416 | 0.0111** |
| | *C* | 1.8577 | 0.0001* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1C

*Malaysia: Public Consumption, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,2,2,2,2) | D(PuC(-1)) | -0.1397 | 0.7392 |
| | D(PuC(-2)) | -0.9421 | 0.0417** |
| | D(MCAP) | -0.2733 | 0.0345** |
| | D(MCAP(-1)) | 0.1581 | 0.2376 |
| | D(MINT) | -0.0441 | 0.8119 |
| | D(MINT(-1)) | -0.3372 | 0.1072 |
| | D(MCONS) | -0.0651 | 0.6996 |
| | D(MCONS(-1)) | 0.4387 | 0.0428** |
| | D(SPuC) | -0.2762 | 0.0023* |
| | D(SPUC(-1)) | 0.1582 | 0.0414** |
| | CointEq(-1) | 0.3464 | 0.0608*** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.1584 | 0.3432 |
| | MINT | 0.7362 | 0.2222 |
| | MCONS | 0.2817 | 0.4371 |
| | SPuC | 0.9956 | 0.0551** |
| | C | -1.1248 | 0.1416 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1D

*Malaysia: Gross Fixed Capital Formation, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,0,0,0,0) | D(MCAP) | -0.1314 | 0.1531 |
| | D(MINT) | 0.1281 | 0.6186 |
| | D(MCONS) | 0.0033 | 0.9854 |
| | D(SGFCF) | -0.5654 | 0.0010* |
| | CointEq(-1) | -0.1164 | 0.2964 |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | -1.1291 | 0.4136 |
| | MINT | 1.1001 | 0.6379 |
| | MCONS | 0.0284 | 0.9849 |
| | SGFCF | -4.8574 | 0.3577 |
| | C | 5.4813 | 0.1744 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1E
*Malaysia: Exports, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,1,2,3,3) | D(X(-1)) | -0.1736 | 0.3297 |
| | D(X(-2)) | -0.3372 | 0.1909 |
| | D(MCAP) | 0.1651 | 0.0284** |
| | D(MINT) | 0.2983 | 0.0153** |
| | D(MINT(-1)) | 0.2208 | 0.0415** |
| | D(MCONS) | 0.0292 | 0.7686 |
| | D(MCONS(-1)) | -0.2787 | 0.0512** |
| | D(MCONS(-2)) | 0.2017 | 0.2363 |
| | D(SX) | 0.0728 | 0.0397** |
| | D(SX(-1)) | -0.0836 | 0.1325 |
| | D(SX(-2)) | 0.0438 | 0.1074*** |
| | CointEq(-1) | -0.2956 | 0.0075* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.7395 | 0.0004* |
| | MINT | 0.0147 | 0.9736 |
| | MCONS | -0.0424 | 0.9056 |
| | SX | 0.5556 | 0.0676** |
| | C | 2.2068 | 0.0041* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1F
*Malaysia: Services, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,0,0,0,0) | D(MCAP) | 0.0031 | 0.9501 |
| | D(MINT) | 0.1301 | 0.2191 |
| | D(MCONS) | 0.0769 | 0.3361 |
| | D(SS) | 0.0162 | 0.6272 |
| | CointEq(-1) | -0.2448 | 0.0004* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.0126 | 0.9496 |
| | MINT | 0.5317 | 0.2568 |
| | MCONS | 0.3141 | 0.2909 |
| | SS | 0.0661 | 0.6265 |
| | C | 1.9978 | 0.0004* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1G
*Malaysia: Private Consumption, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,0,0,0,0) | *D(XCAP)* | -0.0358 | 0.0663*** |
| | *D(XINT)* | 0.1237 | 0.0839*** |
| | *D(XCONS)* | 0.1359 | 0.0843*** |
| | *D(SPvC)* | -0.1448 | 0.0003* |
| | *CointEq(-1)* | -0.2843 | 0.0009* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | *XCAP* | -0.1258 | 0.0436** |
| | *XINT* | 0.4358 | 0.0689*** |
| | *XCONS* | 0.4783 | 0.0421** |
| | *SPvC* | -0.5092 | 0.0092* |
| | *C* | 2.0587 | 0.0010* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1H
*Malaysia: Public Consumption, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,2,2,2,2) | *D(XCAP)* | 0.0183 | 0.8032 |
| | *D(XCAP(-1))* | -0.1113 | 0.1514 |
| | *D(XINT)* | 0.0351 | 0.8453 |
| | *D(XINT(-1))* | 0.3844 | 0.0144 |
| | *D(XCONS)* | 0.2926 | 0.1043*** |
| | *D(XCONS(-1))* | -0.2153 | 0.1093 |
| | *D(SPuC)* | -0.1578 | 0.0010* |
| | *D(SPuC(-1))* | 0.1249 | 0.0132** |
| | *CointEq(-1)* | -0.2412 | 0.2238 |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | *XCAP* | 0.1678 | 0.4069 |
| | *XINT* | -1.7426 | 0.2834 |
| | *XCONS* | 2.4353 | 0.1071 |
| | *SPuC* | -0.9761 | 0.1645 |
| | *C* | -0.894 | 0.3073 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1I

Malaysia: *Gross Fixed Capital Formation, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,2,1,1,2) | D(GFCF(-1)) | -0.0047 | 0.9856 |
| | D(GFCF(-2)) | 0.3592 | 0.0871*** |
| | D(XCAP) | 0.0922 | 0.3914 |
| | D(XCAP(-1)) | 0.3139 | 0.0306** |
| | D(XINT) | -0.2654 | 0.3035 |
| | D(XCONS) | 0.3215 | 0.1325 |
| | D(SGFCF) | -0.6133 | 0.0002* |
| | D(SGFCF(-1)) | -0.3585 | 0.0287** |
| | CointEq(-1) | -0.1301 | 0.2017 |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | -0.5932 | 0.3747 |
| | XINT | 1.5902 | 0.4201 |
| | XCONS | -0.3891 | 0.8111 |
| | SGFCF | -3.1496 | 0.4647 |
| | C | 2.9556 | 0.1579 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.
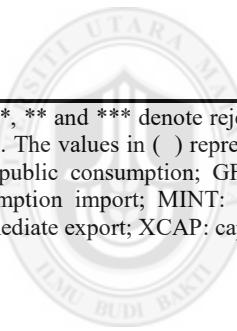
Table 4.6.1J
*Malaysia: Imports, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (2,2,3,3,3) | D(M(-1)) | -0.6641 | 0.1106 |
| | D(XCAP) | 0.0437 | 0.5641 |
| | D(XCAP(-1)) | 0.5928 | 0.0413** |
| | D(XINT) | -0.2363 | 0.4934 |
| | D(XINT(-1)) | -0.7562 | 0.0363** |
| | D(XINT(-2)) | 0.4044 | 0.0636** |
| | D(XCONS) | -0.0521 | 0.8242 |
| | D(XCONS(-1)) | 1.1809 | 0.0445** |
| | D(XCONS(-2)) | -0.4714 | 0.1135 |
| | D(SM) | -0.3236 | 0.0054* |
| | D(SM(-1)) | -0.0521 | 0.4312 |
| | D(SM(-2)) | 0.1505 | 0.0629*** |
| | CointEq(-1) | -0.7571 | 0.0685*** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | 0.2731 | 0.0022* |
| | XINT | 0.5434 | 0.0858*** |
| | XCONS | -0.0211 | 0.9346 |
| | SM | -1.0111 | 0.0264** |
| | C | 2.2507 | 0.0001* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.6.1K
*Malaysia: Services, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (2,3,3,3,3) | D(S(-1)) | 0.3939 | 0.0757*** |
| | D(XCAP) | -0.0096 | 0.8355 |
| | D(XCAP(-1)) | -0.1534 | 0.0862*** |
| | D(XCAP(-2)) | 0.1436 | 0.0985*** |
| | D(XINT) | 0.5944 | 0.0024* |
| | D(XINT(-1)) | -0.3613 | 0.0813*** |
| | D(XINT(-2)) | 0.1205 | 0.2405 |
| | D(XCONS) | -0.1029 | 0.3193 |
| | D(XCONS(-1)) | -0.2466 | 0.0948*** |
| | D(XCONS(-2)) | -0.1103 | 0.4004 |
| | D(SS) | 0.0729 | 0.0925*** |
| | D(SS(-1)) | -0.0281 | 0.3815 |
| | D(SS(-2)) | 0.0879 | 0.0216** |
| | CointEq(-1) | -1.2048 | 0.0051* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | -0.0222 | 0.3829 |
| | XINT | 0.2894 | 0.0361** |
| | XCONS | 0.6182 | 0.0021* |
| | SS | 0.0069 | 0.9243 |
| | C | 1.4178 | 0.0001* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

**Appendix B-6**

Table 4.7.1A
*Philippines: ARDL Bound Test for Cointegration*

| Model (Import Components) | F-Statistics |
|---|---|
| *PvC,MCAP,MINT,MCONS* | 10.2712* |
| *PuC,MCAP,MINT,MCONS* | 7.4902* |
| *GFCF,MCAP,MINT,MCONS* | 3.0904*** |
| *X,MCAP,MINT,MCONS* | 1.4379 |
| *S,MCAP,MINT,MCONS* | 0.7468 |
| Model (Export Components) | F-Statistics |
| *PvC,XCAP,XINT,XCONS* | 6.5603* |
| *PuC,,XCAP,XINT,XCONS* | 20.0815* |
| *GFCF,XCAP,XINT,XCONS* | 2.9972 |
| *M,XCAP,XINT,XCONS* | 1.7356 |
| *S,XCAP,XINT,XCONS* | 0.4629 |
| *1% (LB:3.29;UB:4.39);  **5%(LB:2.56;UB3.49);  ***10%(LB2.20;UB3.09) | |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1B
*Philippines: Private Consumption, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,0,2,1,2) | *D(MCAP)* | -0.0252 | 0.0114** |
| | *D(MINT)* | 0.0051 | 0.8402 |
| | *D(MINT(-1))* | -0.0453 | 0.1296 |
| | *D(MCONS)* | -0.0082 | 0.6151 |
| | *D(SPvC)* | 0.0121 | 0.2654 |
| | *D(SPvC(-1))* | -0.0303 | 0.0235** |
| | *CointEq(-1)* | -0.2741 | 0.0012* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | *MCAP* | 0.0921 | 0.0109** |
| | *MINT* | -0.6118 | 0.0139** |
| | *MCONS* | 0.7276 | 0.0002* |
| | *SPvC* | -0.2434 | 0.0163** |
| | *C* | 4.2028 | 0.0003* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1C
*Philippines: Public Consumption, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,1,0,1,1) | D(MCAP) | 0.0302 | 0.6914 |
| | D(MINT) | 0.0926 | 0.4344 |
| | D(MCONS) | -0.1474 | 0.1341 |
| | D(SPuC) | -0.0574 | 0.3199 |
| | CointEq(-1) | -0.3527 | 0.0303** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | -0.1476 | 0.4513 |
| | MINT | 0.2624 | 0.3763 |
| | MCONS | 0.5191 | 0.0044* |
| | SPuC | 0.0255 | 0.9018 |
| | C | 1.7223 | 0.0303** |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1D
*Philippines: Gross Fixed Capital Formation, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (2,0,0,0,2) | D(MCAP) | 0.187219 | 0.0242** |
| | D(MINT) | 0.437359 | 0.0321** |
| | D(MCONS) | -0.039631 | 0.7741 |
| | D(SGFCF) | -0.022038 | 0.7222 |
| | CointEq(-1) | -0.466145 | 0.0257** |
| | D(SGFCF(-1)) | -0.148284 | 0.0363** |
| | CointEq(-1) | -0.299884 | 0.0186** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | -0.090074 | 0.4998 |
| | MINT | 0.512895 | 0.2226 |
| | MCONS | 0.429231 | 0.0319** |
| | SGFCF | -0.047277 | 0.7184 |
| | C | 1.814479 | 0.0121** |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1E
*Philippines: Exports, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,0,0,0,0) | D(MCAP) | 0.0015 | 0.9812 |
| | D(MINT) | 0.2149 | 0.3276 |
| | D(MCONS) | 0.5211 | 0.0022* |
| | D(SX) | -0.0782 | 0.3171 |
| | CointEq(-1) | -1.1151 | 0.0001* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.0014 | 0.9812 |
| | MINT | 0.1936 | 0.3422 |
| | MCONS | 0.4694 | 0.0010* |
| | SX | -0.0704 | 0.3182 |
| | C | 2.5807 | 0.0020* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1F
*Philippines: Services, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (5,0,0,0,0) | D(S(-1)) | -0.2946 | 0.2741 |
| | D(S(-2)) | 0.3182 | 0.3866 |
| | D(S(-3)) | 0.6353 | 0.1545 |
| | D(S(-4)) | -0.7467 | 0.0533** |
| | D(MCAP) | -0.0541 | 0.2181 |
| | D(MINT) | 0.1654 | 0.1151 |
| | D(MCONS) | 0.0941 | 0.1014 |
| | D(SS) | -0.0133 | 0.4861 |
| | CointEq(-1) | -0.2491 | 0.0751*** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | -0.2168 | 0.0821*** |
| | MINT | 0.6641 | 0.0323** |
| | MCONS | 0.3783 | 0.0292** |
| | SS | -0.0533 | 0.5284 |
| | C | 3.0795 | 0.0006* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1G
*Philippines: Private Consumption, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,1,1,0,1) | D(XCAP) | 0.0176 | 0.2715 |
| | D(XINT) | 0.0042 | 0.7459 |
| | D(XCONS) | -0.0045 | 0.8391 |
| | D(SPvC) | -0.0174 | 0.0492** |
| | CointEq(-1) | -0.0845 | 0.0057* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | 0.2192 | 0.0626** |
| | XINT | 0.4102 | 0.0078* |
| | XCONS | 0.0534 | 0.8331 |
| | SPvC | 0.4882 | 0.0065* |
| | C | 2.8626 | 0.0002* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1H
*Philippines: Public Consumption, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,2,1,1,2) | D(PuC(-1)) | -1.1312 | 0.0109** |
| | D(PuC(-2)) | -1.0723 | 0.0141** |
| | D(XCAP) | -0.1151 | 0.3851 |
| | D(XCAP(-1)) | 0.1099 | 0.2035 |
| | D(XINT) | 0.1497 | 0.1281 |
| | D(XCONS) | 0.0781 | 0.6396 |
| | D(SPuC) | -0.1506 | 0.0524** |
| | D(SPuC(-1)) | 0.0595 | 0.3882 |
| | CointEq(-1) | -0.2239 | 0.1002*** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | -1.1224 | 0.0292** |
| | XINT | 2.0757 | 0.1608 |
| | XCONS | -0.5009 | 0.6145 |
| | SPuC | -1.5717 | 0.1061 |
| | C | 5.4503 | 0.0138* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1I
*Philippines: Gross Fixed Capital Formation, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (2,0,0,0,2) | *D(GFCF(-1))* | -0.2227 | 0.1568 |
| | *D(XCAP)* | 0.0906 | 0.3068 |
| | *D(XINT)* | -0.1175 | 0.0722*** |
| | *D(XCONS)* | 0.5963 | 0.0029* |
| | *D(SGFCF)* | 0.0464 | 0.2578 |
| | *D(SGFCF(-1))* | -0.1483 | 0.0361** |
| | *CointEq(-1)* | -0.2999 | 0.0186** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | *XCAP* | 0.3028 | 0.3743 |
| | *XINT* | -0.3902 | 0.0981*** |
| | *XCONS* | 1.9875 | 0.0023* |
| | *SGFCF* | 1.6587 | 0.0167** |
| | *C* | -1.2092 | 0.4326 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1J
*Philippines: Imports, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,0,0,0,0) | *D(XCAP)* | 0.0077 | 0.9471 |
| | *D(XINT)* | 0.1279 | 0.3728 |
| | *D(XCONS)* | 0.1788 | 0.4241 |
| | *D(SM)* | -0.0747 | 0.4246 |
| | *CointEq(-1)* | -0.4175 | 0.1952 |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | *XCAP* | 0.0184 | 0.9469 |
| | *XINT* | 0.3063 | 0.2479 |
| | *XCONS* | 0.4283 | 0.3825 |
| | *SM* | -0.1788 | 0.5597 |
| | *C* | 2.8125 | 0.0011* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.7.1K
*Philippines: Services, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (5,0,0,0,0) | $D(S(-1))$ | -0.8187 | 0.0257** |
| | $D(S(-2))$ | -1.5517 | 0.0225** |
| | $D(S(-3))$ | -0.6605 | 0.0588*** |
| | $D(S(-4))$ | -0.4198 | 0.0543** |
| | $D(XCAP)$ | 0.1488 | 0.0146** |
| | $D(XINT)$ | 0.1576 | 0.0101* |
| | $D(XCONS)$ | -0.0852 | 0.0707*** |
| | $D(SS)$ | 0.0251 | 0.2401 |
| | $CointEq(-1)$ | -0.0343 | 0.4027 |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | $XCAP$ | 4.3379 | 0.4035 |
| | $XINT$ | 4.5938 | 0.3601 |
| | $XCONS$ | -2.4835 | 0.5015 |
| | $SS$ | 0.7291 | 0.2956 |
| | $C$ | -4.2312 | 0.6151 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

## Appendix B-7

Table 4.8.1A
*Singapore: ARDL Bound Test for Cointegration*

| Model (Import Components) | F-Statistics |
|---|---|
| PvC,MCAP,MINT,MCONS | 1.3651 |
| PuC,MCAP,MINT,MCONS | 5.5973* |
| GFCF,MCAP,MINT,MCONS | 5.4839* |
| X,MCAP,MINT,MCONS | 2.8021 |
| S,MCAP,MINT,MCONS | 3.8672** |
| Model (Export Components) | F-Statistics |
| PvC,XCAP,XINT,XCONS | 7.7445* |
| PvC,XCAP,XINT,XCONS | 8.6512* |
| GFCF,XCAP,XINT,XCONS | 2.2431 |
| M,XCAP,XINT,XCONS | 3.0420 |
| S,XCAP,XINT,XCONS | 1.8856 |
| *1%        (LB:3.29;UB:4.39); ***10%(LB2.20;UB3.09) | **5%(LB:2.56;UB3.49); |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1B
*Singapore: Private Consumption, Imports & Structural*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,0,0,0,0) | D(MCAP) | 0.0515 | 0.2365 |
| | D(MINT) | -0.0675 | 0.3329 |
| | D(MCONS) | 0.0991 | 0.1145 |
| | D(SPvC) | 0.0679 | 0.0457** |
| | CointEq(-1) | -0.2036 | 0.0311** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.2528 | 0.0854*** |
| | MINT | -0.3315 | 0.2731 |
| | MCONS | 0.4863 | 0.0217** |
| | SPvC | 0.3332 | 0.1954 |
| | C | 2.3832 | 0.0001* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1C
*Singapore: Public Consumption, Imports & Structural*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,3,2,3,3) | D(PuC(-1)) | -0.2043 | 0.0589*** |
| | D(PuC(-2)) | -0.2902 | 0.0145** |
| | D(MCAP) | -0.1841 | 0.1383 |
| | D(MCAP(-1)) | -0.2417 | 0.0167** |
| | D(MCAP(-2)) | -0.3131 | 0.0031* |
| | D(MINT) | 0.4064 | 0.0098* |
| | D(MINT(-1)) | 0.4931 | 0.0025* |
| | D(MCONS) | -0.1389 | 0.0489** |
| | D(MCONS(-1)) | -0.4063 | 0.0091* |
| | D(MCONS(-2)) | -0.0997 | 0.1326 |
| | D(SPuC) | 0.1318 | 0.0178** |
| | D(SPuC(-1)) | -0.0725 | 0.0613*** |
| | D(SPuC(-2)) | 0.0402 | 0.1064 |
| | CointEq(-1) | -0.7756 | 0.0007* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.4174 | 0.0009* |
| | MINT | -0.0373 | 0.6943 |
| | MCONS | 0.2664 | 0.0078* |
| | SPuC | 0.3895 | 0.0076* |
| | C | 0.1548 | 0.4448 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1D
*Singapore: Gross Fixed Capital Formation, Imports & Structural*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (4,3,2,3,2) | D(GFCF(-1)) | 1.8426 | 0.0606*** |
| | D(GFCF(-2)) | 0.4601 | 0.4403 |
| | D(GFCF(-3)) | 1.6775 | 0.0132** |
| | D(MCAP) | 1.5585 | 0.0175** |
| | D(MCAP(-1)) | -0.8886 | 0.0402** |
| | D(MCAP(-2)) | 0.9946 | 0.0101* |
| | D(MINT) | -1.5357 | 0.0216** |
| | D(MINT(-1)) | 0.8164 | 0.0337** |
| | D(MCONS) | 0.7653 | 0.0109* |
| | D(MCONS(-1)) | -0.0775 | 0.7437 |
| | D(MCONS(-2)) | -0.3135 | 0.3666 |
| | D(SGFCF) | -0.0708 | 0.5436 |
| | D(SGFCF(-1)) | 0.0415 | 0.4129 |
| | CointEq(-1) | -1.1299 | 0.1009*** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.9649 | 0.0151* |
| | MINT | -2.2138 | 0.0244** |
| | MCONS | 1.6358 | 0.0162** |
| | SGFCF | -0.1459 | 0.3765 |
| | C | 0.0231 | 0.9689 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1E
*Singapore: Exports, Imports & Structural*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,2,2,2,2) | D(X(-1)) | 0.1059 | 0.6755 |
| | D(X(-2)) | -0.2441 | 0.0862*** |
| | D(MCAP) | 0.3368 | 0.0047* |
| | D(MCAP(-1)) | -0.1235 | 0.4616 |
| | D(MINT) | 0.4051 | 0.0103* |
| | D(MINT(-1)) | 0.1398 | 0.1496 |
| | D(MCONS) | 0.0666 | 0.4564 |
| | D(MCONS(-1)) | -0.2793 | 0.0145* |
| | D(SGFCF) | 0.0245 | 0.4879 |
| | D(SGFCF(-1)) | -0.0164 | 0.4908 |
| | CointEq(-1) | -0.8571 | 0.0086* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.6071 | 0.0001* |
| | MINT | 0.1515 | 0.2255 |
| | MCONS | 0.3602 | 0.0062* |
| | SGFCF | 0.0651 | 0.4127 |
| | C | 1.0418 | 0.0010* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1F
*Singapore: Services, Imports & Structural*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,0,1,2,0) | D(S(-1)) | 0.0241 | 0.9151 |
| | D(S(-2)) | -0.3158 | 0.0511 |
| | D(MCAP) | 0.0613 | 0.3880 |
| | D(MINT) | 0.1907 | 0.0119*** |
| | D(MCONS) | 0.0642 | 0.2754 |
| | D(MCONS(-1)) | -0.1551 | 0.0837 |
| | D(SS) | -0.0056 | 0.8344 |
| | CointEq(-1) | -0.4138 | 0.0475** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.1475 | 0.1934 |
| | MINT | 0.1617 | 0.4932 |
| | MCONS | 0.4134 | 0.0074* |
| | SS | -0.0134 | 0.8274 |
| | C | 2.0933 | 0.0020* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1G
*Singapore: Private Consumption, Exports & Structural*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,1,0,0,2) | D(PvC(-1)) | -0.4879 | 0.0114* |
| | D(PvC(-2)) | -0.2885 | 0.2249 |
| | D(XCAP) | 0.0972 | 0.2591 |
| | D(XINT) | 0.0227 | 0.7455 |
| | D(XCONS) | 0.1152 | 0.0158** |
| | D(SPvC) | 0.1003 | 0.0088* |
| | D(SPvC(-1)) | -0.1086 | 0.0022* |
| | CointEq(-1) | -0.2568 | 0.0251** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | -0.1181 | 0.5247 |
| | XINT | 0.0885 | 0.7257 |
| | XCONS | 0.4485 | 0.0675*** |
| | SPvC | 1.4147 | 0.0112* |
| | C | 2.8694 | 0.0007* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1H
*Singapore: Public Consumption, Exports & Structural*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,3,3,3,3) | D(XCAP) | -0.1259 | 0.3889 |
| | D(XCAP(-1)) | -0.2522 | 0.1282 |
| | D(XCAP(-2)) | -0.1983 | 0.1043*** |
| | D(XINT) | 0.2823 | 0.0655*** |
| | D(XINT(-1)) | -0.0479 | 0.6658 |
| | D(XINT(-2)) | 0.2196 | 0.0930*** |
| | D(XCONS) | -0.2449 | 0.0252** |
| | D(XCONS(-1)) | -0.1754 | 0.1588 |
| | D(XCONS(-2)) | -0.3354 | 0.0314** |
| | D(SPuC) | 0.1983 | 0.0023* |
| | D(SPuC(-1)) | -0.1551 | 0.0324** |
| | D(SPuC(-2)) | -0.0346 | 0.4141 |
| | CointEq(-1) | -1.1355 | 0.0030* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | 0.2309 | 0.0168* |
| | XINT | 0.5185 | 0.0096* |
| | XCONS | -0.1078 | 0.3526 |
| | SPuC | 0.5557 | 0.0003* |
| | C | 0.4507 | 0.1518 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

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Table 4.8.1I
*Singapore: Gross Fixed Capital Formation, Exports & Structural*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,0,0,0,0) | D(XCAP) | 0.2001 | 0.0152** |
| | D(XINT) | -0.3949 | 0.0031* |
| | D(XCONS) | 0.4199 | 0.0005* |
| | D(SGFCF) | 0.0704 | 0.2321 |
| | CointEq(-1) | -0.3067 | 0.0003* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | 0.6525 | 0.0048* |
| | XINT | -1.2877 | 0.0056* |
| | XCONS | 1.3693 | 0.0011* |
| | SGFCF | 0.2296 | 0.2281 |
| | C | -0.2181 | 0.7461 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.8.1J
*Singapore: Imports, Exports & Structural*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,0,0,2,1) | D(XCAP) | 0.6091 | 0.0012* |
| | D(XINT) | -0.0692 | 0.4182 |
| | D(XCONS) | 0.2213 | 0.0467** |
| | D(XCONS(-1)) | -0.1202 | 0.1519 |
| | D(SM) | -0.0572 | 0.1862 |
| | CointEq(-1) | -0.9611 | 0.0001* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | 0.6337 | 0.0020* |
| | XINT | -0.0718 | 0.4106 |
| | XCONS | 0.4844 | 0.0001* |
| | SM | -0.1113 | 0.0918*** |
| | C | 0.8831 | 0.0002* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

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Table 4.8.1K
*Singapore: Services, Exports & Structural*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,1,0,0,0) | *D(S(-1))* | -0.1675 | 0.3715 |
| | *D(S(-2))* | -0.2317 | 0.1527 |
| | *D(XCAP)* | 0.1491 | 0.1366 |
| | *D(XINT)* | -0.0021 | 0.9719 |
| | *D(XCONS)* | 0.1299 | 0.0277** |
| | *D(SS)* | 0.0156 | 0.6238 |
| | *CointEq(-1)* | -0.2193 | 0.0057* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | *XCAP* | 0.0668 | 0.7569 |
| | *XINT* | -0.0098 | 0.9723 |
| | *XCONS* | 0.5925 | 0.0186** |
| | *SS* | 0.0712 | 0.6351 |
| | *C* | 2.3891 | 0.0058* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

## Appendix B-8

Table 4.9.1A
*Thailand: ARDL Bound Test for Cointegration*

| Model (Import Components) | F-Statistics |
|---|---|
| *PvC,MCAP,MINT,MCONS* | 2.5434 |
| *PuC,MCAP,MINT,MCONS* | 3.7361** |
| *GFCF,MCAP,MINT,MCONS* | 1.1639 |
| *X,MCAP,MINT,MCONS* | 2.5917 |
| *S,MCAP,MINT,MCONS* | 0.9195 |
| Model (Export Components) | F-Statistics |
| *PvC,XCAP,XINT,XCONS* | 1.9361 |
| *PuC,XCAP,XINT,XCONS* | 10.7721* |
| *GFCF,XCAP,XINT,XCONS* | 1.3859 |
| *M,XCAP,XINT,XCONS* | 0.9525 |
| *S,XCAP,XINT,XCONS* | 22.0591* |
| *1% (LB:3.29;UB:4.39); ***10%(LB2.20;UB3.09) | **5%(LB:2.56;UB3.49); |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

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Table 4.9.1B
*Thailand: Private Consumption, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (5,0,0,0,0) | D(PvC(-1)) | 0.0079 | 0.9416 |
| | D(PvC(-2)) | 0.3121 | 0.0009* |
| | D(PvC(-3)) | 0.0559 | 0.3621 |
| | D(PvC(-4)) | -0.1537 | 0.0393** |
| | D(MCAP) | -0.0139 | 0.5146 |
| | D(MINT) | 0.0896 | 0.0191** |
| | D(MCONS) | -0.0184 | 0.2473 |
| | D(SPvC) | -0.1438 | 0.0003* |
| | CointEq(-1) | -0.0879 | 0.0122* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | -0.1587 | 0.5167 |
| | MINT | 1.0197 | 0.0473** |
| | MCONS | -0.2049 | 0.3622 |
| | SPvC | -1.6362 | 0.0182** |
| | C | 3.9768 | 0.0012* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1C
*Thailand: Public Consumption, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,3,3,3,3) | D(MCAP) | -0.0818 | 0.4976 |
| | D(MCAP(-1)) | 0.1263 | 0.3497 |
| | D(MCAP(-2)) | -0.0635 | 0.6241 |
| | D(MINT) | 0.0512 | 0.8086 |
| | D(MINT(-1)) | -0.0558 | 0.6770 |
| | D(MINT(-2)) | 0.1783 | 0.3012 |
| | D(MCONS) | -0.0681 | 0.5382 |
| | D(MCONS(-1)) | 0.0469 | 0.6905 |
| | D(MCONS(-2)) | -0.1873 | 0.0630*** |
| | D(SPuC) | -0.2192 | 0.0098* |
| | D(SPuC(-1)) | -0.0032 | 0.9729 |
| | D(SPuC(-2)) | 0.1414 | 0.1247 |
| | CointEq(-1) | -0.1957 | 0.1004*** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | -0.3852 | 0.6763 |
| | MINT | -0.2442 | 0.8499 |
| | MCONS | 0.8047 | 0.0977*** |
| | SPuC | -2.6376 | 0.1028 |
| | C | 4.0206 | 0.0332** |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

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Table 4.9.1D
*Thailand: Gross Fixed Capital Formation, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (2,0,0,0,0) | D(GFCF(-1)) | 0.3004 | 0.0058* |
| | D(MCAP) | -0.0054 | 0.9456 |
| | D(MINT) | 0.3164 | 0.0488** |
| | D(MCONS) | 0.0292 | 0.5984 |
| | D(SGFCF) | -0.3926 | 0.0017* |
| | CointEq(-1) | -0.4468 | 0.0002* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | -0.0122 | 0.9458 |
| | MINT | 0.7082 | 0.0586*** |
| | MCONS | 0.0654 | 0.5811 |
| | SGFCF | -0.8787 | 0.0028* |
| | C | 2.6944 | 0.0024* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1E
*Thailand: Exports, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (4,2,2,2,2) | D(X(-1)) | -0.1675 | 0.6951 |
| | D(X(-2)) | -0.0831 | 0.5194 |
| | D(X(-3)) | -0.0356 | 0.7723 |
| | D(MCAP) | -0.0953 | 0.3422 |
| | D(MCAP(-1)) | -0.2404 | 0.1953 |
| | D(MINT) | -0.0043 | 0.9806 |
| | D(MINT(-1)) | 0.3405 | 0.2221 |
| | D(MCONS) | 0.3577 | 0.0182** |
| | D(MCONS(-1)) | -0.0996 | 0.3722 |
| | D(SX) | -0.3446 | 0.0017* |
| | D(SX(-1)) | -0.0956 | 0.3132 |
| | CointEq(-1) | -0.7961 | 0.0417** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | 0.3622 | 0.0875*** |
| | MINT | -0.7645 | 0.0895*** |
| | MCONS | 0.7453 | 0.0008* |
| | SX | -0.3934 | 0.0469** |
| | C | 4.1014 | 0.0001* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1F
*Thailand: Services, Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (4,0,0,0,0) | D(S(-1)) | 0.2504 | 0.0002* |
| | D(S(-2)) | 0.0433 | 0.2993 |
| | D(S(-3)) | -0.0015 | 0.9756 |
| | D(MCAP) | -0.0097 | 0.7064 |
| | D(MINT) | 0.0171 | 0.7015 |
| | D(MCONS) | 0.0455 | 0.0118** |
| | D(SS) | -0.2345 | 0.0005* |
| | CointEq(-1) | -0.0866 | 0.0073* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | MCAP | -0.1123 | 0.7071 |
| | MINT | 0.1967 | 0.6964 |
| | MCONS | 0.5202 | 0.0048* |
| | SS | -2.7079 | 0.0083* |
| | C | 4.0354 | 0.0017* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1G
*Thailand: Private Consumption, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (2,1,2,0,0) | D(PvC(-1)) | 0.3175 | 0.0407** |
| | D(XCAP) | -0.0904 | 0.0194** |
| | D(XINT) | -0.0178 | 0.7283 |
| | D(XINT(-1)) | -0.0704 | 0.1389 |
| | D(XCONS) | 0.1353 | 0.0594*** |
| | D(SPvC) | -0.0985 | 0.0006* |
| | CointEq(-1) | -0.2664 | 0.0269** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | -0.0088 | 0.9046 |
| | XINT | 0.2056 | 0.1591 |
| | XCONS | 0.5076 | 0.0048* |
| | SPvC | -0.3704 | 0.0833*** |
| | C | 3.4257 | 0.0001* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1H
*Thailand: Public Consumption, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,0,3,0,1) | D(PuC(-1)) | 0.0515 | 0.7763 |
| | D(PuC(-2)) | 0.5685 | 0.0058* |
| | D(XCAP) | 0.0418 | 0.1128 |
| | D(XINT) | -0.3061 | 0.0015* |
| | D(XINT(-1)) | -0.2187 | 0.0245** |
| | D(XINT(-2)) | 0.1761 | 0.0031* |
| | D(XCONS) | 0.2027 | 0.0431** |
| | D(SPuC) | -0.1667 | 0.0023* |
| | CointEq(-1) | -0.3133 | 0.0133** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | 0.1313 | 0.2767 |
| | XINT | 0.1681 | 0.3504 |
| | XCONS | 0.6469 | 0.0019* |
| | SPuC | -1.0019 | 0.0247** |
| | C | 0.6519 | 0.0318** |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1I
*Thailand: Gross Fixed Capital Formation, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,0,0,0,0) | D(GFCF(-1)) | 0.4401 | 0.0006* |
| | D(GFCF(-2)) | -0.2845 | 0.0456** |
| | D(XCAP) | -0.0413 | 0.2743 |
| | D(XINT) | 0.1509 | 0.1691 |
| | D(XCONS) | -0.0322 | 0.8195 |
| | D(SGFCF) | -0.4523 | 0.0021* |
| | CointEq(-1) | -0.0984 | 0.1004*** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | XCAP | -0.4197 | 0.4438 |
| | XINT | 1.5338 | 0.4192 |
| | XCONS | -0.3275 | 0.8474 |
| | SGFCF | -4.5966 | 0.4347 |
| | C | 2.6993 | 0.1643 |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1J
*Thailand: Imports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (1,0,0,0,0) | *D(XCAP)* | 0.0219 | 0.3511 |
| | *D(XINT)* | 0.3657 | 0.0047* |
| | *D(XCONS)* | 0.0997 | 0.3782 |
| | *D(SX)* | -0.3118 | 0.0001* |
| | *CointEq(-1)* | -0.5242 | 0.0003* |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | *XCAP* | 0.0418 | 0.3293 |
| | *XINT* | 0.6963 | 0.0007* |
| | *XCONS* | 0.1902 | 0.3476 |
| | *SX* | -0.5948 | 0.0171** |
| | *C* | 1.7544 | 0.0001* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.9.1K
*Thailand: Services, Exports & Structural Break*

| Cointegrating Form | Variable | Coefficient | Prob. |
|---|---|---|---|
| Model (3,0,0,0,1) | *D(S(-1))* | -0.2851 | 0.0111** |
| | *D(S(-2))* | 0.0997 | 0.1264 |
| | *D(XCAP)* | -0.0377 | 0.0023* |
| | *D(XINT)* | 0.1174 | 0.0017* |
| | *D(XCONS)* | 0.0146 | 0.7385 |
| | *D(SS)* | -0.2654 | 0.0021* |
| | *CointEq(-1)* | -0.1052 | 0.0239** |
| Long Run Coefficients | Variable | Coefficient | Prob. |
| | *XCAP* | -0.3585 | 0.0725*** |
| | *XINT* | 1.1155 | 0.0273** |
| | *XCONS* | 0.1382 | 0.7148 |
| | *SS* | -3.9955 | 0.0349** |
| | *C* | 2.6611 | 0.0002* |

Note: *, ** and *** denote rejection of the null hypothesis at the 1, 5 and 10 percent level of confidence respectively for PP. The values in ( ) represent p-value and the value in [ ] represent number of lags. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; M: imports; S: services; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

**Appendix B-9**

Table 4.10A
*Pedroni Panel Cointegration Test (Imports: Capital, Intermediate & Consumption)*

| Constant | PvC | PuC | GFCF | X | S |
|---|---|---|---|---|---|
| Panel-v | 1.2812 | 0.8807 | 0.1725 | 0.8807 | 1.1492 |
| Panel-$\rho$ | -0.2121 | 0.0023 | 0.3814 | -0.2848 | -0.2626 |
| Panel- $\rho\rho$ | -1.8625* | -1.4241 | -2.1078* | -5.2200* | -1.8433* |
| Panel-adf | -1.0567 | -0.9621 | -2.5552* | -3.6600* | -0.8963 |
| Group- $\rho$ | 0.7319 | 1.0693 | 1.0572 | 0.3963 | 0.8691 |
| Group- $\rho\rho$ | -1.6646* | -1.2775 | -1.8878* | -5.6232* | -1.4157 |
| Group-adf | -0.8632 | -0.607 | -2.6772* | -3.5821* | -0.6993 |

Note: *Pedroni (2004) statistics of one-sided tests with a critical value of -1.64 ($k < -1.64$ denotes the null of no cointegration is rejected) with the exception for the *v*-statistic which has a critical value of 1.64 ($k > 1.64$ where the null of no cointegration is rejected) at 5% significance level. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; S: services.

Table 4.10B
*Pedroni Panel Cointegration Test (Imports: Capital, Intermediate & Consumption)*

| Constant & Trend | PvC | PuC | GFCF | X | S |
|---|---|---|---|---|---|
| Panel-v | 13.3530* | 5.1470* | 1.0543 | 3.5169* | 13.8392* |
| Panel-$\rho$ | 0.5613 | 0.7808 | 1.2635 | 0.3897 | -0.2743 |
| Panel- $\rho\rho$ | -1.4243 | -0.7462 | -0.4989 | -4.3474* | -4.4875* |
| Panel-adf | -1.1446 | 0.6115 | -1.4434 | -2.3357* | -3.7771* |
| Group- $\rho$ | 1.3884 | 1.8430* | 1.9424* | 1.2392 | 1.4973 |
| Group- $\rho\rho$ | -1.1767 | -0.3381 | -0.8637 | -7.5146* | -2.4682* |
| Group-adf | -0.4607 | -0.0182 | -0.5917 | -3.8957* | -2.5238* |

Note: *Pedroni (2004) statistics of one-sided tests with a critical value of -1.64 ($k < -1.64$ denotes the null of no cointegration is rejected) with the exception for the *v*-statistic which has a critical value of 1.64 ($k > 1.64$ where the null of no cointegration is rejected) at 5% significance level. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; X: exports; S: services.

Table 4.10C

*Pedroni Panel Cointegration Test (Exports: Capital Intermediate & Consumption)*

| Constant | PvC | PuC | GFCF | M | S |
|---|---|---|---|---|---|
| Panel-v | 0.8718 | 0.3088 | 0.8656 | 1.7123* | 0.5578 |
| Panel-ρ | 0.2473 | 0.3974 | 0.1788 | 0.7128 | 0.4158 |
| Panel- ρρ | -0.5213 | -0.3618 | -0.6875 | -0.7882 | -0.0372 |
| Panel-adf | -0.5043 | 0.0459 | -0.8695 | -3.6640* | 0.1772 |
| Group- ρ | 1.0549 | 1.5469* | 1.2327 | 1.5631 | 1.6843* |
| Group- ρρ | -0.0409 | 0.6461 | 0.1981 | -1.7587* | 1.5096 |
| Group-adf | -0.1453 | 0.8235 | 0.0636 | -3.6481* | 2.0276* |

Note: *Pedroni (2004) statistics of one-sided tests with a critical value of -1.64 ($k < -1.64$ denotes the null of no cointegration is rejected) with the exception for the *v*-statistic which has a critical value of 1.64 ($k > 1.64$ where the null of no cointegration is rejected) at 5% significance level. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; M: imports; S: services.

Table 4.10D

*Pedroni Panel Cointegration Test (Exports: Capital Intermediate & Consumption)*

| Constant & Trend | PvC | PuC | GFCF | M | S |
|---|---|---|---|---|---|
| Panel-v | 9.9182* | 4.6377* | -0.2652 | 0.4418 | 9.7322* |
| Panel-ρ | 1.1649 | 1.1628 | 0.8609 | 1.6275 | 0.8828 |
| Panel- ρρ | -0.5263 | -0.0129 | -1.5574 | -1.1142 | -2.7701* |
| Panel-adf | -1.6316 | -0.3205 | -2.2987* | -4.3921* | -5.3350* |
| Group- ρ | 2.1163* | 1.9825* | 1.1646 | 2.0623* | 1.2973 |
| Group- ρρ | -1.8225* | 0.7857 | -1.8978* | -2.5055* | -2.7945* |
| Group-adf | -2.7424* | 0.8638 | -2.3981* | -3.8956* | -3.5364* |

Note: *Pedroni (2004) statistics of one-sided tests with a critical value of -1.64 ($k < -1.64$ denotes the null of no cointegration is rejected) with the exception for the *v*-statistic which has a critical value of 1.64 ($k > 1.64$ where the null of no cointegration is rejected) at 5% significance level. PvC: private consumption; PuC: public consumption; GFCF: gross fixed capital formation; M: imports; S: services.

**Appendix B-10**

Table 4.11A
*FMOLS (Individual) Results, Dependent Variable: Private Consumption*

|      | Indonesia | Malaysia | Philippines | Singapore | Thailand |
|------|-----------|----------|-------------|-----------|----------|
| *MCAP* | 0.3137** | -0.4092* | -0.1391* | -0.2872 | 0.3215* |
| *MINT* | -0.5605** | -0.1152 | 0.2513** | -0.3612* | -0.0339 |
| *MCON* | 0.1960** | 0.4138* | 0.4872* | 0.7152* | 0.1539** |
| *XCAP* | -0.0197 | 0.0830 | 0.2113* | 1.0581** | -0.0172 |
| *XINT* | -0.1342 | 0.5931* | -0.0752 | 0.0631 | 0.0936 |
| *XCON* | 0.7816* | 0.0271 | -0.0134 | -0.5302* | 0.0352 |

Note: *1%significance level; **5% significance level; ***10% significance level; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export.

Table 4.11B
*FMOLS (Individual) Results, Dependent Variable: Public Consumption*

|      | Indonesia | Malaysia | Philippines | Singapore | Thailand |
|------|-----------|----------|-------------|-----------|----------|
| *MCAP* | 0.7639* | -0.3582 | -0.2519* | -1.0693** | -0.1172 |
| *MINT* | -1.4275* | -0.5512** | 0.0103 | -0.5237* | -0.5745* |
| *MCON* | 0.4508* | 0.4273* | 0.4038* | 0.8254* | 0.8632* |
| *XCAP* | 0.1963 | 0.2239** | -0.1254 | 2.1753* | -0.4791* |
| *XINT* | -0.1856 | 0.9452* | -0.2620** | -0.1953** | 0.4032* |
| *XCON* | 0.9912* | 0.0538 | 0.5415* | -0.4545* | 0.4382** |

Note: *1%significance level; **5% significance level; ***10% significance level; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export

Table 4.11C

*FMOLS (Individual) Results, Dependent Variable: Gross Fixed Capital Formation*

|  | Indonesia | Malaysia | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|
| *MCAP* | 0.7452* | 0.3163** | -0.0552 | -0.0661 | -0.3231*** |
| *MINT* | -0.8238* | -0.1351 | 0.4401* | 0.2128 | 0.9272* |
| *MCON* | 0.4015* | 1.2591* | 0.3630* | 1.0307* | 1.0873* |
| *XCAP* | -0.0972*** | -0.8045* | -0.1817** | 0.0253 | -0.8156* |
| *XINT* | -0.5732* | 0.1510 | -0.2591* | -0.3682** | 0.3437*** |
| *XCON* | 0.8913* | -1.0134* | 0.5208* | -0.4752** | -1.1975* |

Note: *1%significance level; **5% significance level; ***10% significance level; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export

Table 4.11D

*FMOLS (Individual) Results, Dependent Variable: Exports*

|  | Indonesia | Malaysia | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|
| *MCAP* | 0.1853** | 0.3707* | 0.0176 | -0.3581*** | -0.0539*** |
| *MINT* | -0.1161 | 0.2542** | 0.2945* | 0.1130 | 0.0932 |
| *MCON* | 0.3773* | -0.3981* | 0.2531* | 0.4931* | 0.2351* |
| *XCAP* | 0.1082** | 0.2467* | 0.0567 | 1.0159* | 0.3627* |
| *XINT* | -0.0254 | 0.1123 | 0.2249* | -0.0142 | 0.1458* |
| *XCON* | 0.1471 | 0.5161* | -0.0471 | -0.1670** | 0.2139* |

Note: *1%significance level; **5% significance level; ***10% significance level; MCONS: consumption import; MINT: intermediate import; MCAP: capital import; XCONS: consumption export; XINT: intermediate export; XCAP: capital export

Table 4.11E
*FMOLS (Individual) Results, Dependent Variable: Imports*

|  | Indonesia | Malaysia | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|
| *MCAP* | 0.1869** | 0.3768* | 0.0173 | -0.3521*** | -0.0542*** |
| *MINT* | -0.1112 | 0.2538** | 0.2951* | 0.1162*** | 0.0051 |
| *MCON* | 0.3762* | -0.3926* | 0.2506* | 0.4980* | 0.2334* |
| *XCAP* | 0.1083** | 0.2448* | 0.0561 | 1.0161* | 0.3642* |
| *XINT* | -0.0271 | 0.1141 | 0.2263* | -0.0163 | 0.1462* |
| *XCON* | 0.1459 | 0.5182* | -0.0430 | -0.1692** | 0.2173* |

Note: *1%significance level; **5% significance level; ***10% significance level.
MCONS: consumption import; MINT: intermediate import; MCAP: capital
import; XCONS: consumption export; XINT: intermediate export; XCAP: capital
export

Table 4.11F
*FMOLS (Individual) Results, Dependent Variable: Services*

|  | Indonesia | Malaysia | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|
| *MCAP* | 0.5510* | -0.6701* | -0.1872* | -0.9318** | 0.0912** |
| *MINT* | -0.8973* | -0.0462 | 0.2463** | 0.1638 | -0.1863* |
| *MCON* | 0.3279* | 0.3638* | 0.5638* | 0.7830* | 0.6156* |
| *XCAP* | -0.0535 | 0.2203** | 0.2083* | 1.3916** | -0.1534* |
| *XINT* | -0.2093*** | 0.5872* | -0.0452 | -0.0753 | 0.1465* |
| *XCON* | 1.0138* | 0.0949 | 0.0285 | -0.5765* | -0.0392 |

Note: *1%significance level; **5% significance level; ***10% significance level.
MCONS: consumption import; MINT: intermediate import; MCAP: capital import;
XCONS: consumption export; XINT: intermediate export; XCAP: capital export

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**Appendix C**

**Appendix C-1**

Figure B-1A
*Indonesia: Private Consumption (US$bn)*
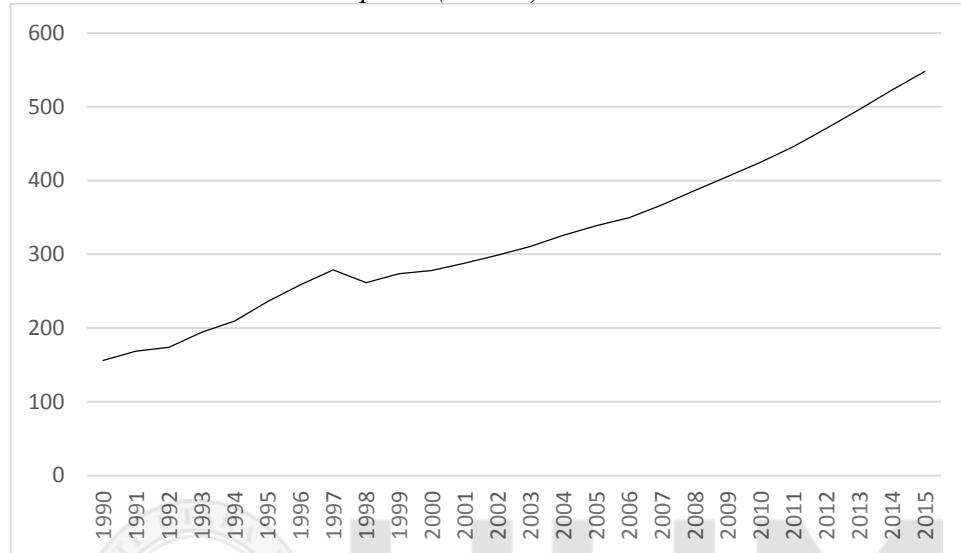
Figure B-1B
*Indonesia: Public Consumption (US$bn)*
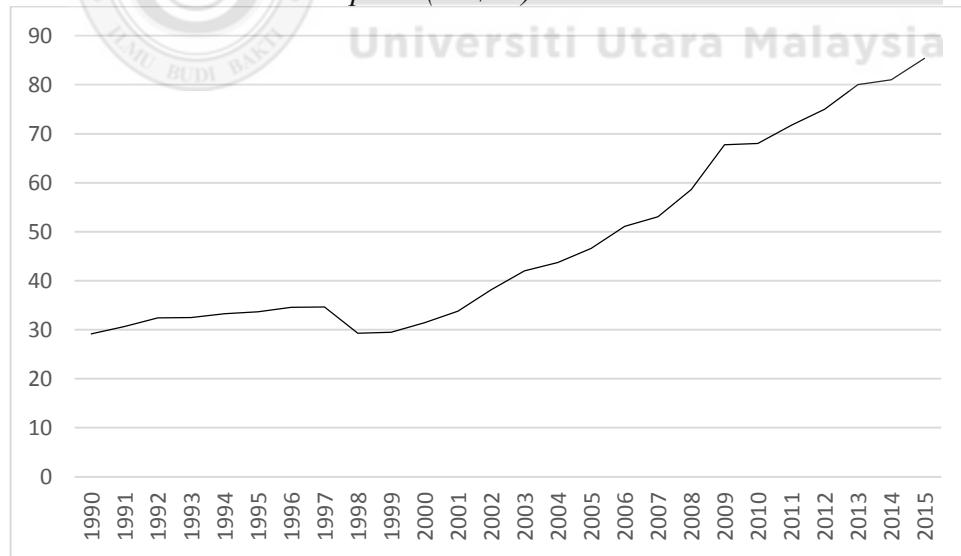
Figure B-1C
*Indonesia: Gross Fixed Capital Formation (US$bn)*
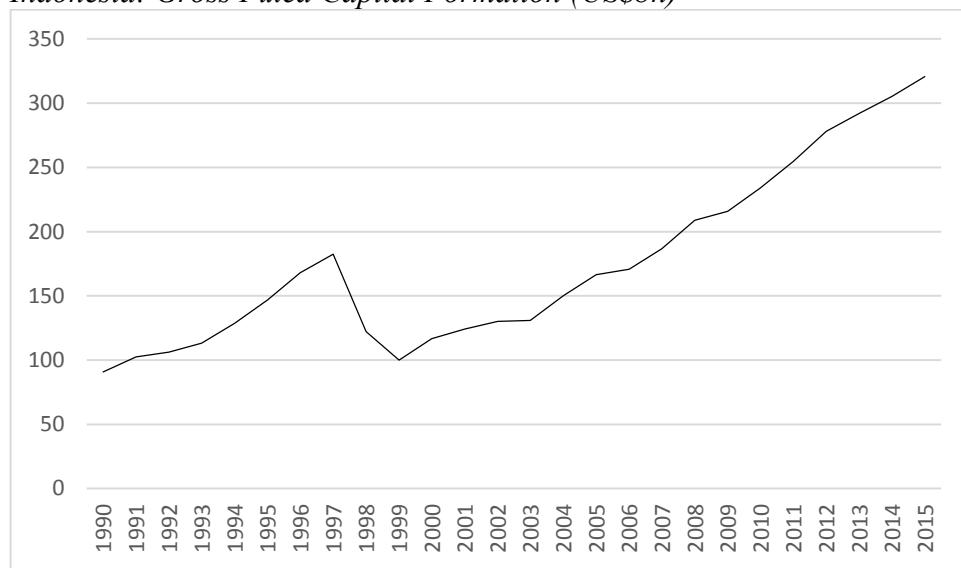
Figure B-1D
*Indonesia: Exports (US$bn)*

230
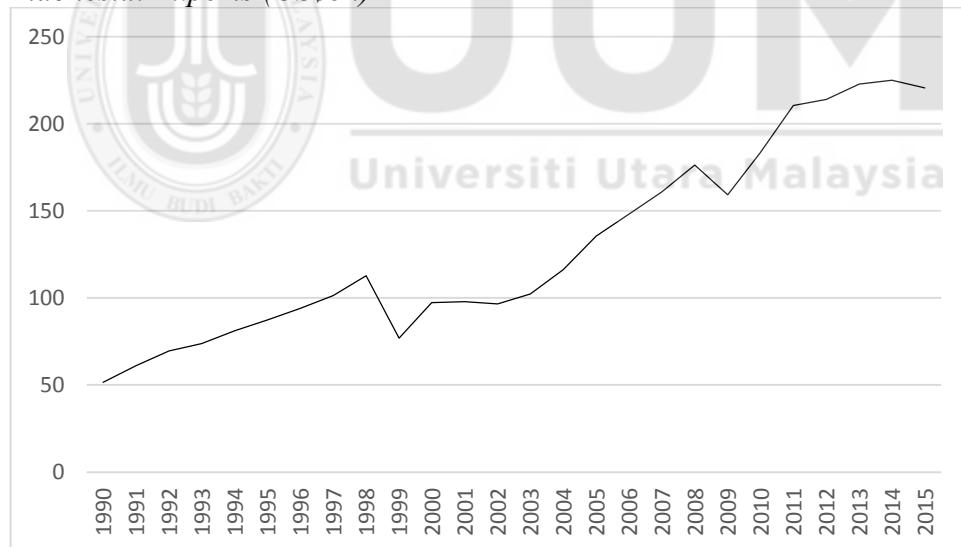
Figure B-1E
*Indonesia: Imports (US$bn)*
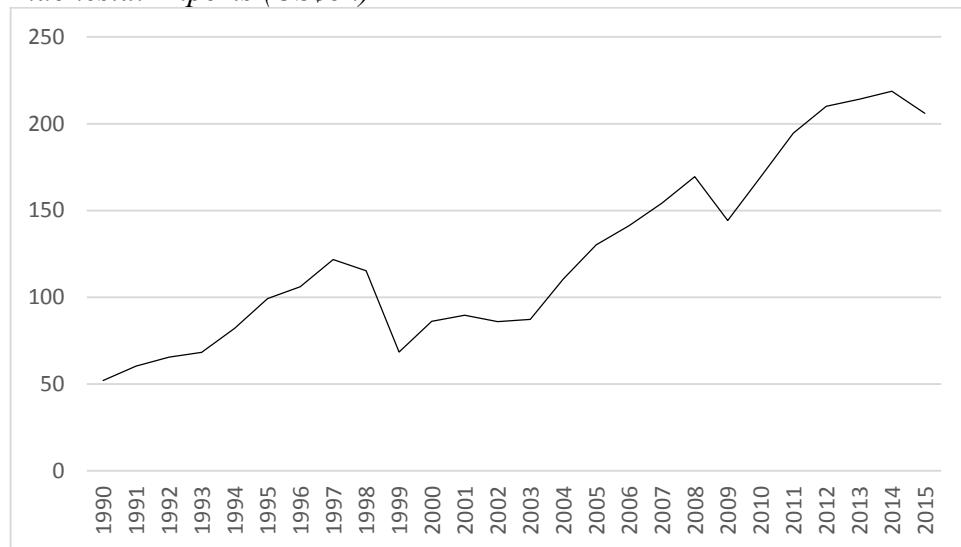
Figure B-1F
*Indonesia: Services (US$bn)*

231
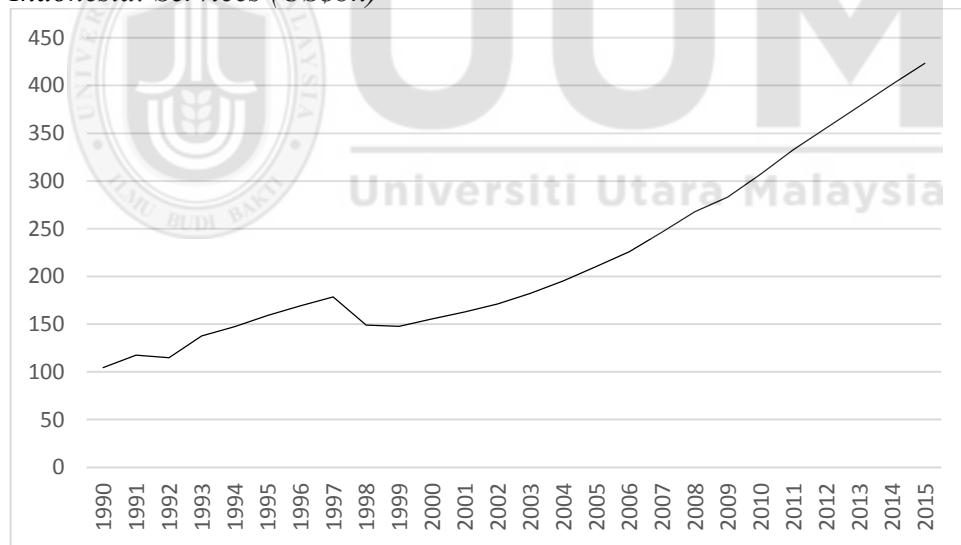
Figure B-1G
*Indonesia: Capital Imports (US$bn)*
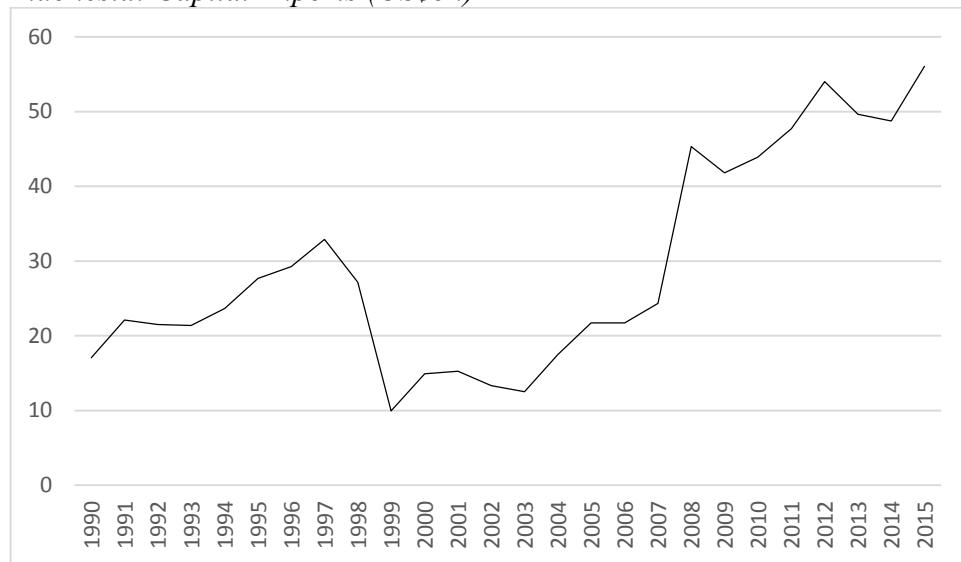
Figure B-1H
*Indonesia: Intermediate Imports (US$bn)*
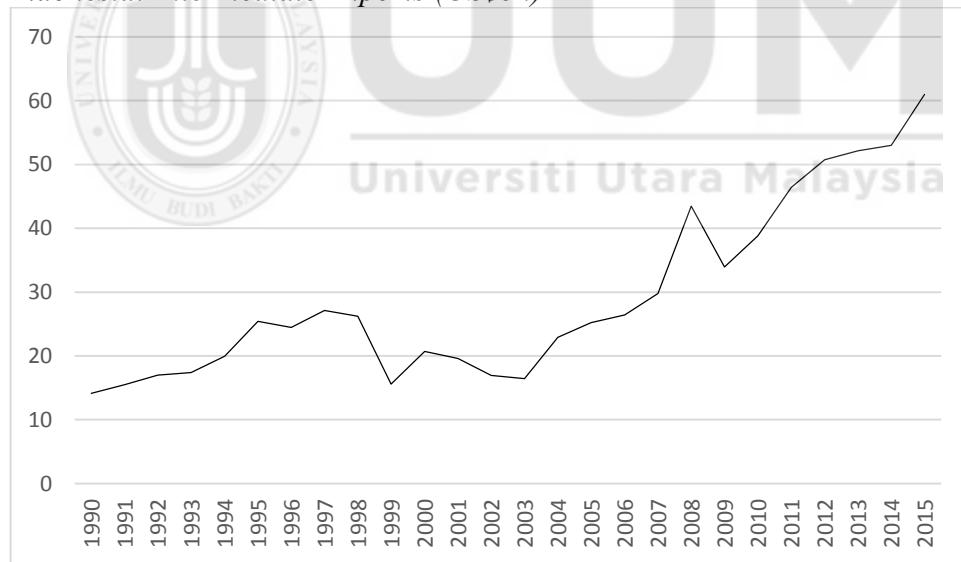
Figure B-1I
*Indonesia: Consumption Imports (US$bn)*
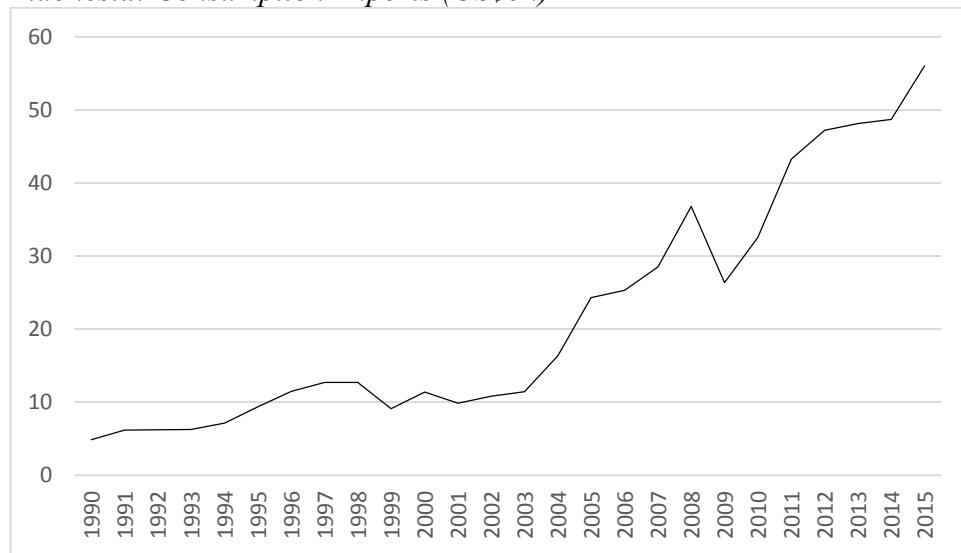
Figure B-1J
*Indonesia: Capital Exports (US$bn)*

233
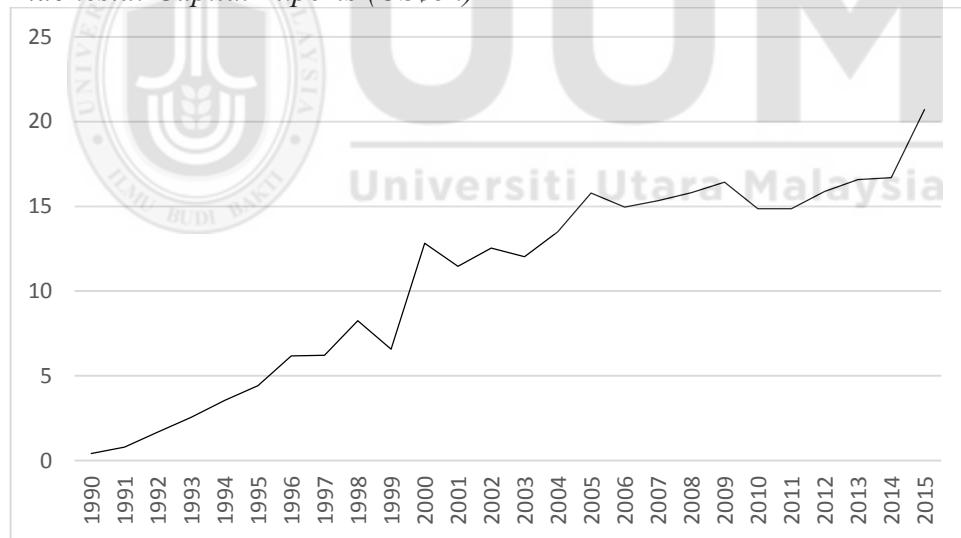
Figure B-1K
*Indonesia: Intermediate Exports (US$bn)*
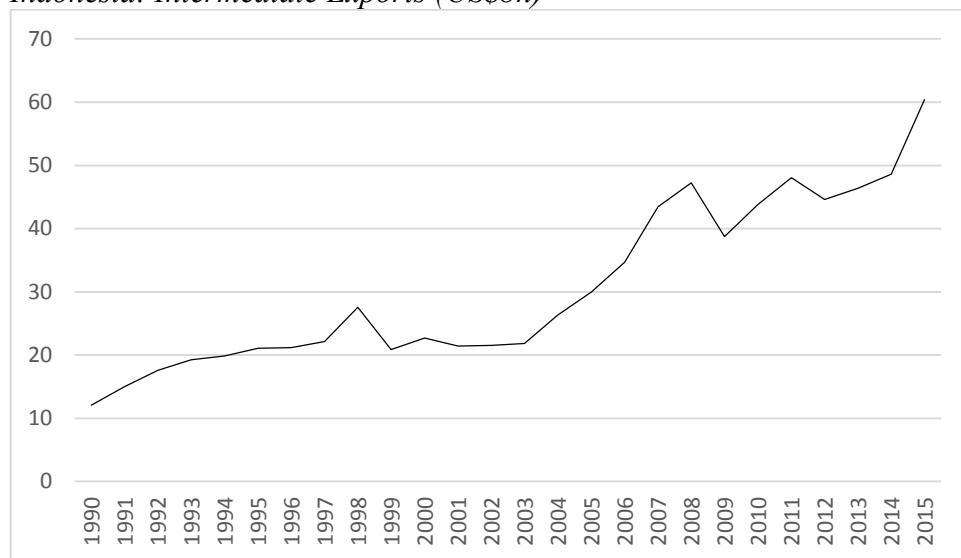
Figure B-1L
*Indonesia: Consumption Exports (US$bn)*

234
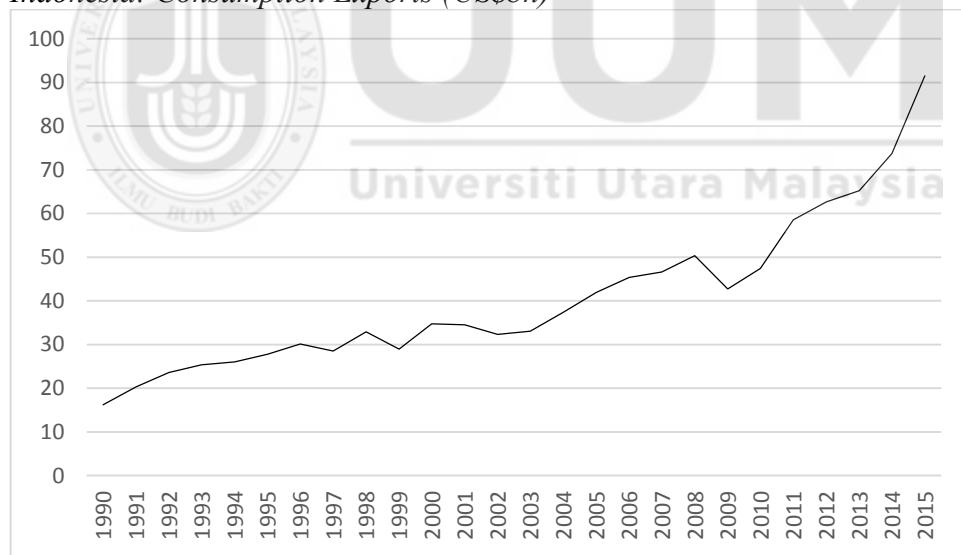
**Appendix C-2**

Figure B-2A
*Malaysia: Private Consumption (US$bn)*
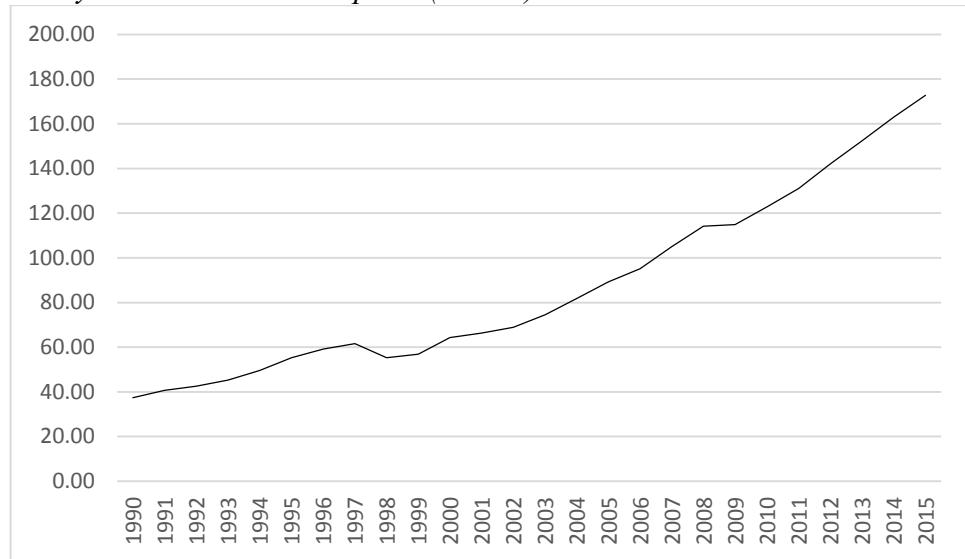
Figure B-2B
*Malaysia Public Consumption (US$bn)*

235
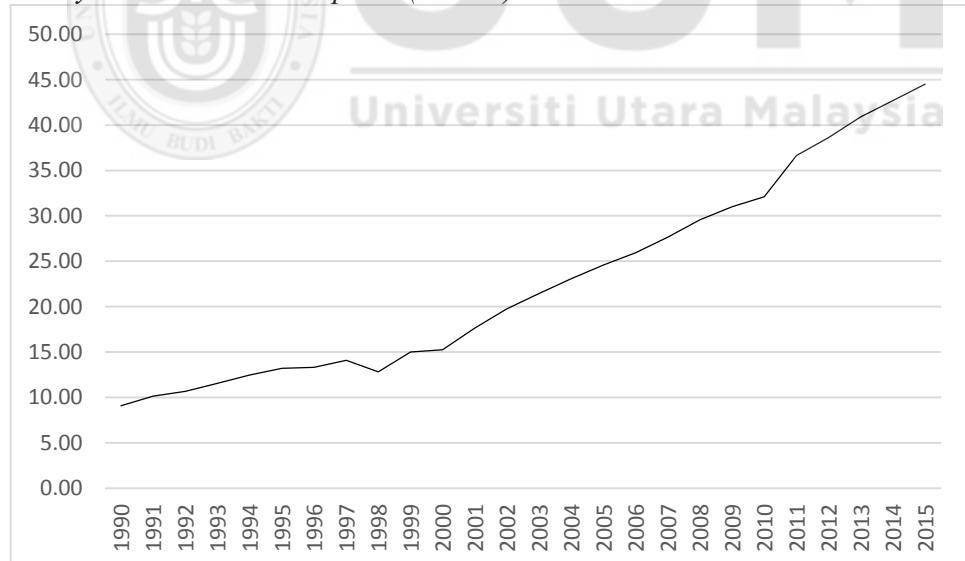
Figure B-2C
*Malaysia Gross Fixed Capital Formation (US$bn)*
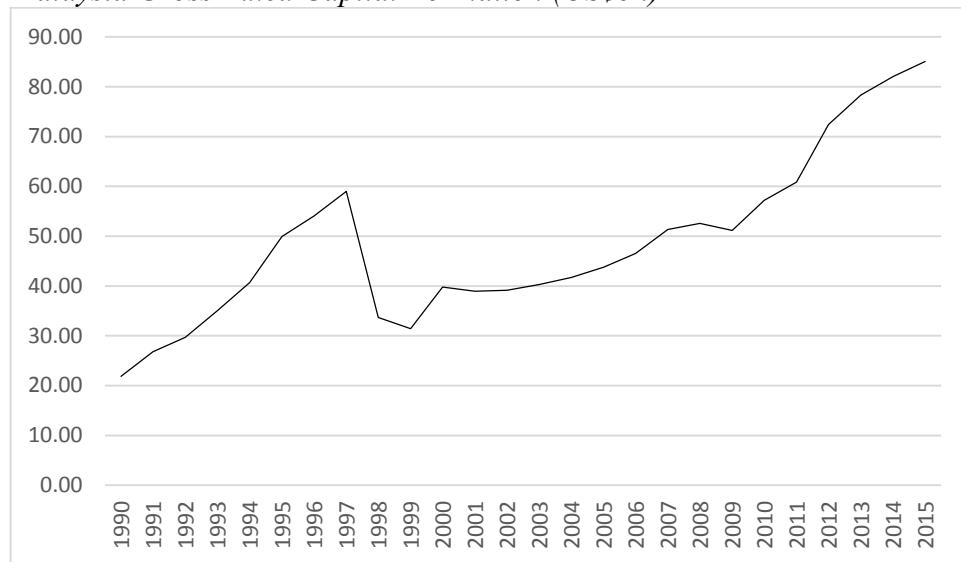


Source: Author


Figure B-2D
*Malaysia: Exports (US$bn)*



Source: Author

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Figure B-2E
*Malaysia: Imports (US$bn)*

Figure B-2F
*Malaysia: Services (US$bn)*

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Figure B-2G
*Malaysia: Capital Imports (US$bn)*
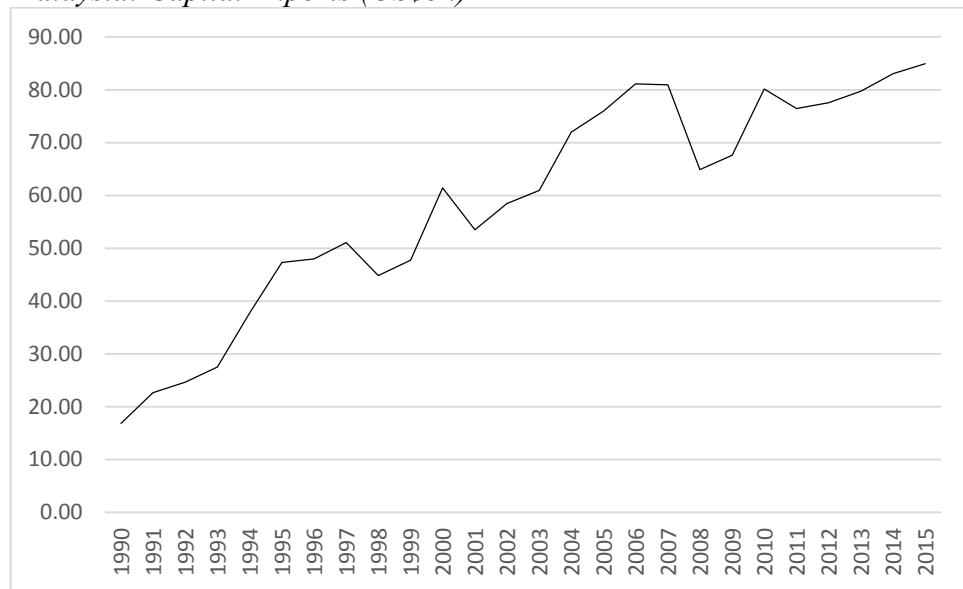
Figure B-2H
*Malaysia: Intermediate Imports (US$bn)*

238
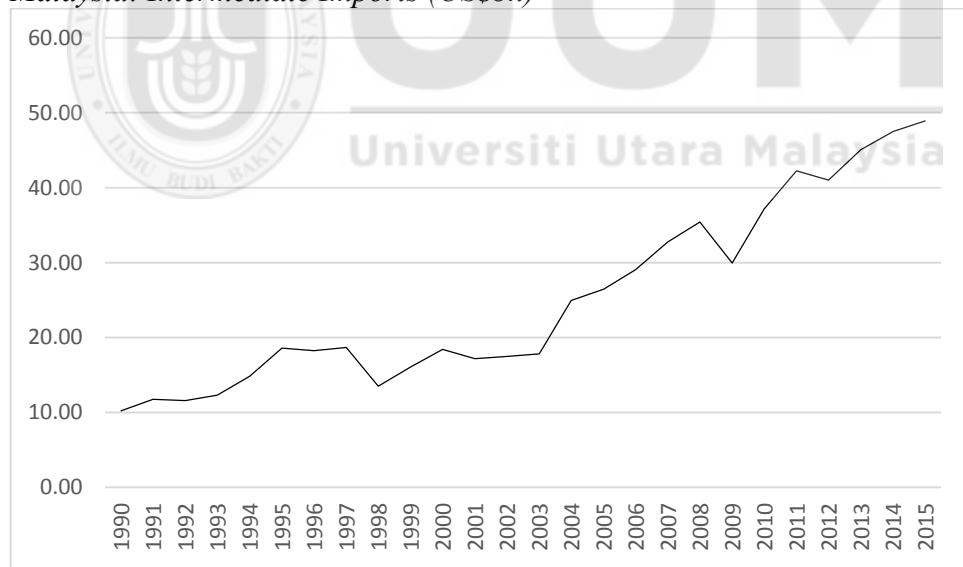
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*Malaysia: Consumption Imports (US$)*
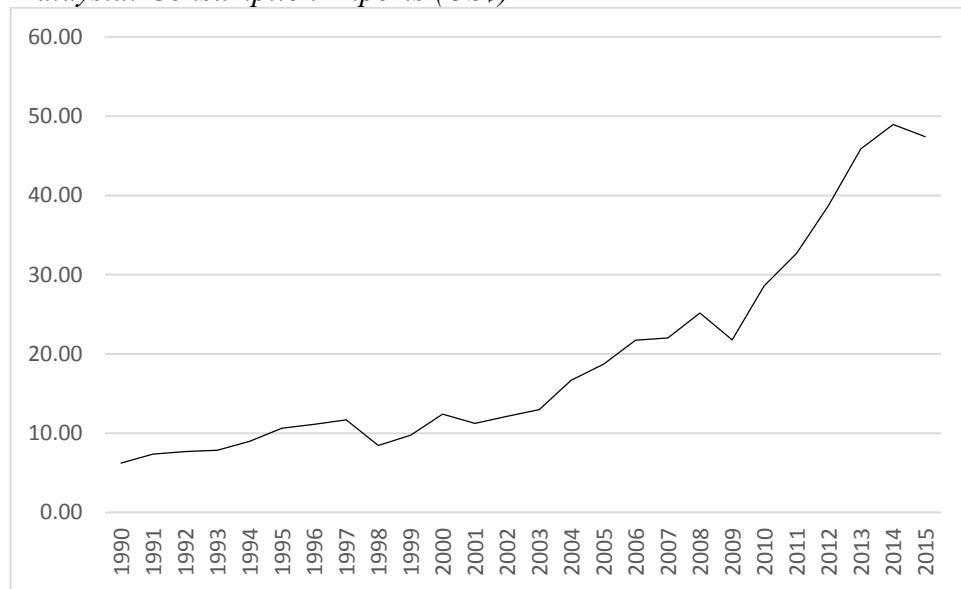
Figure B-2J
*Malaysia: Capital Exports (US$bn)*

239
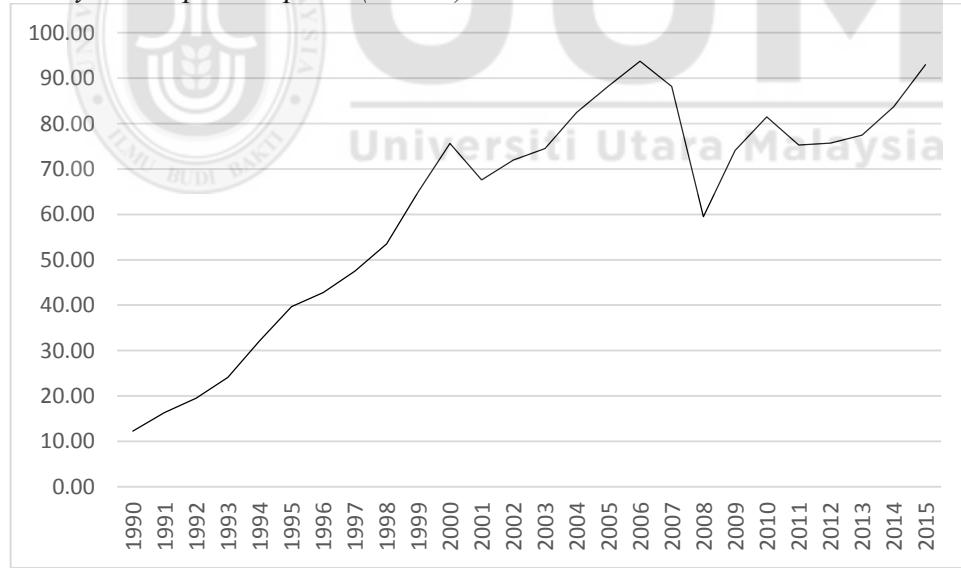
Figure B-2K
*Malaysia: Intermediate Exports (US$bn)*
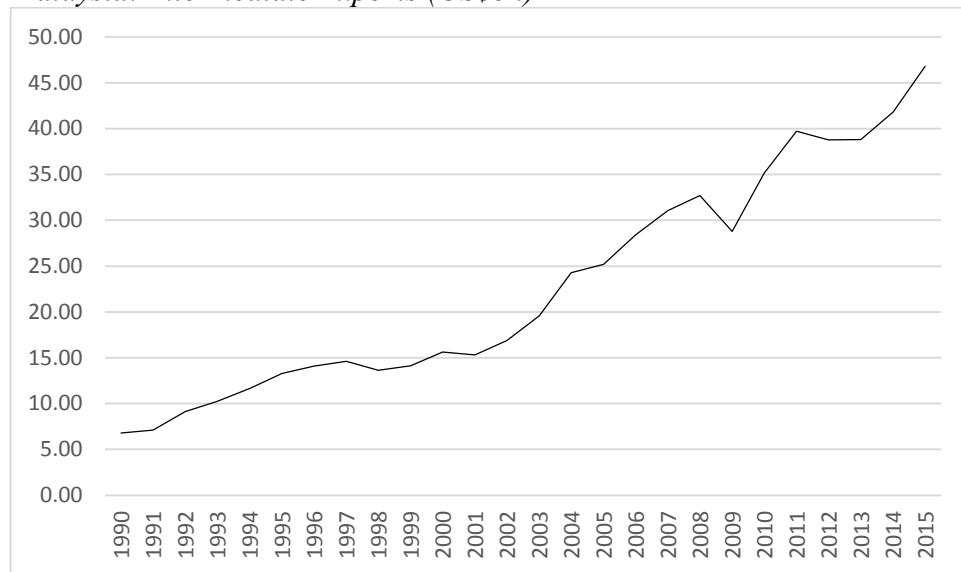
Figure B-2L
*Malaysia: Consumption Exports (US$bn)*
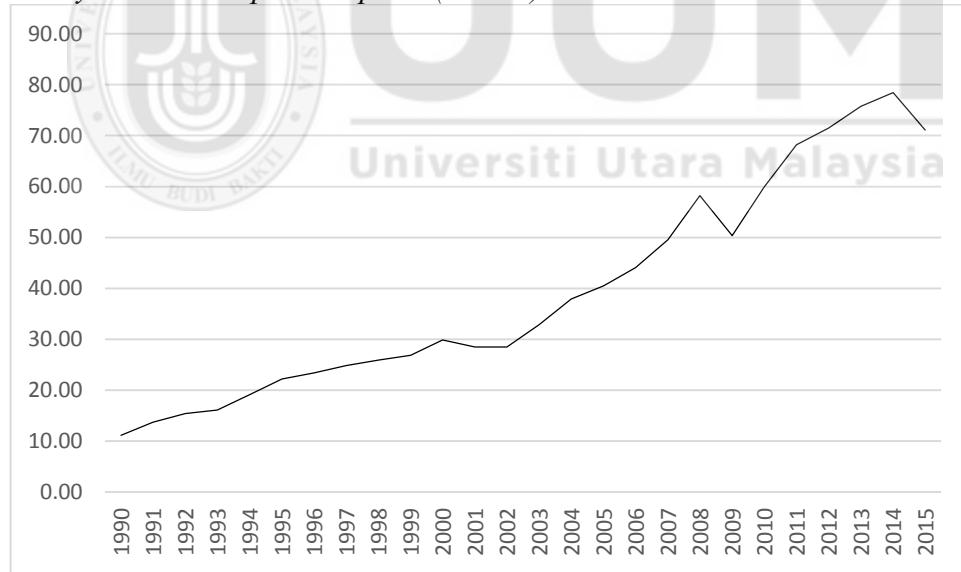
**Appendix C-3**

Figure B-3A
*Philippines: Private Consumption (US$bn)*
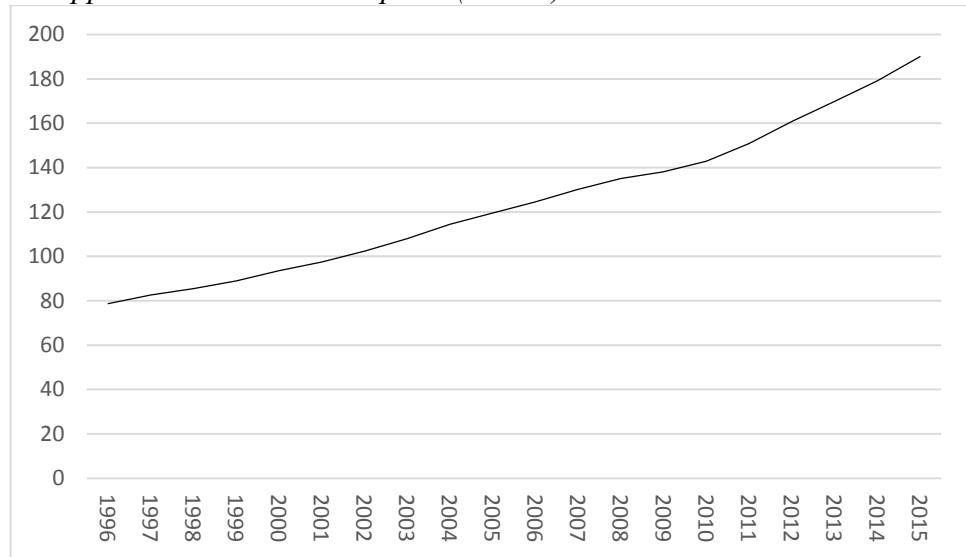
Figure B-3B
*Philippines Public Consumption (US$bn)*
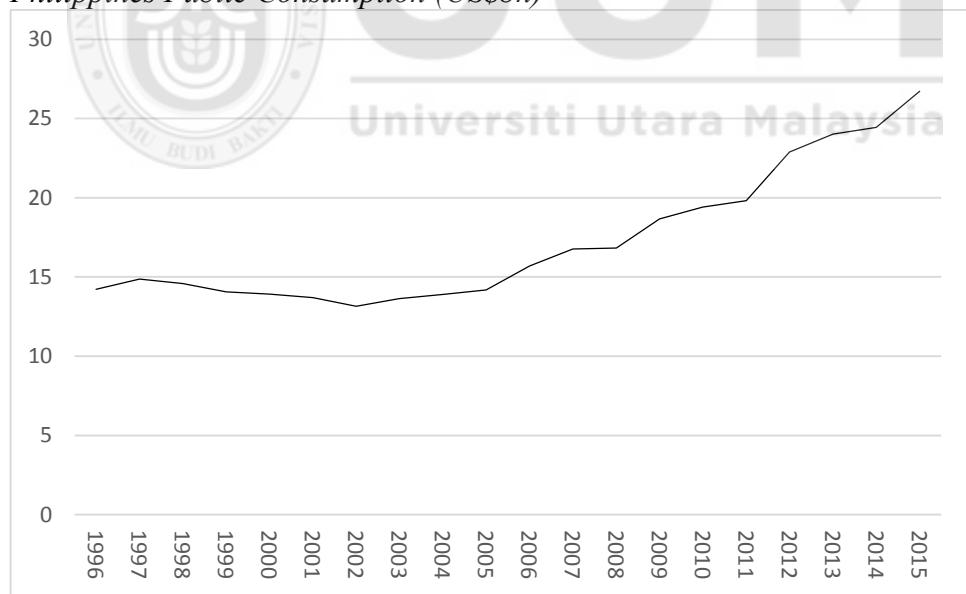
Figure B-3C
*Philippines Gross Fixed Capital Formation (US$bn)*
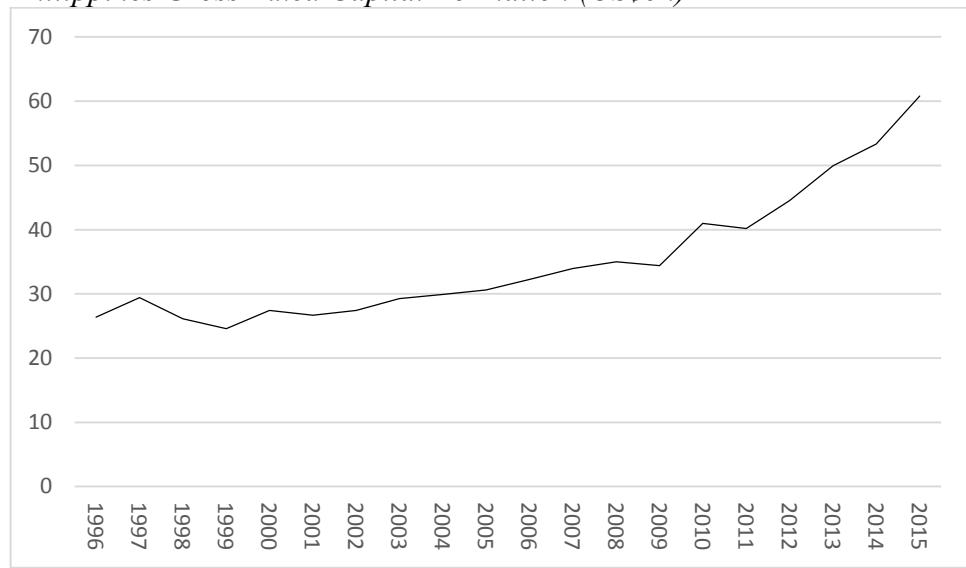
Figure B-3D
*Philippines: Exports (US$bn)*

242
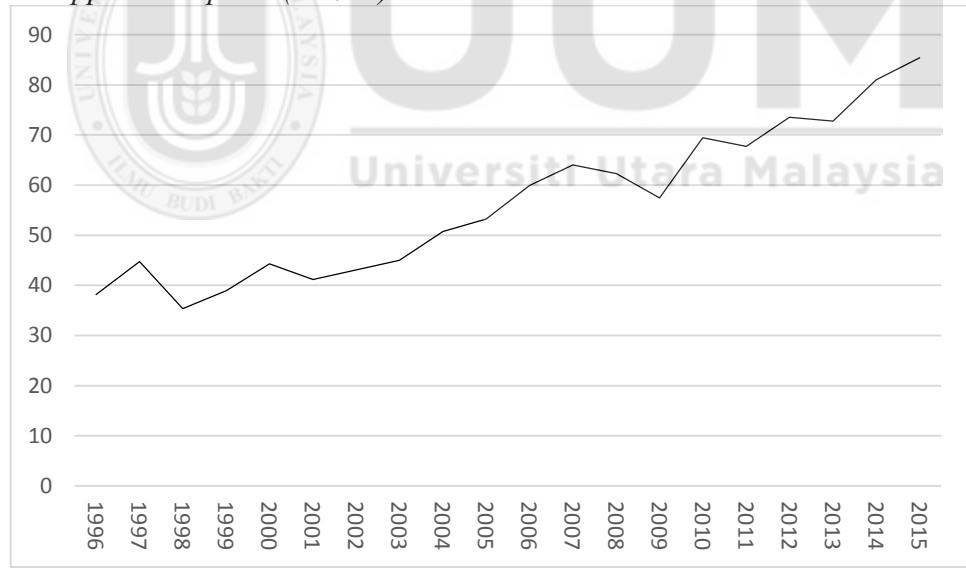
Figure B-3E
*Philippines: Imports (US$bn)*
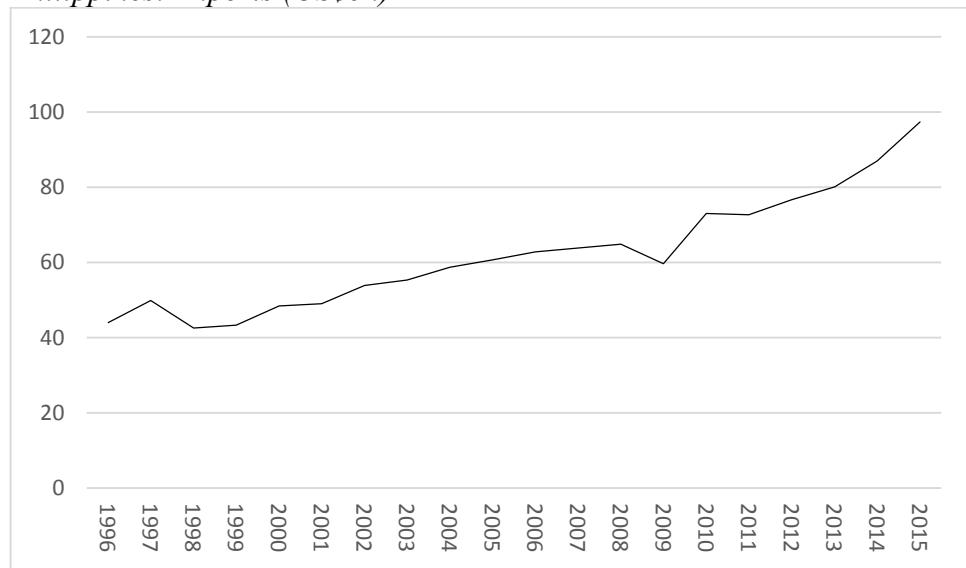
Figure B-3F
*Philippines: Services (US$bn)*

243
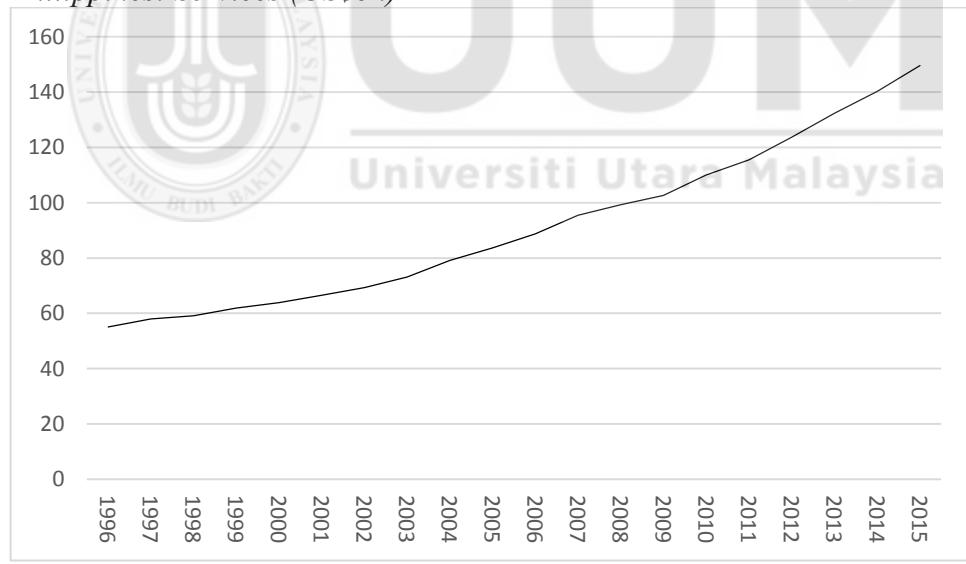
Figure B-3G
*Philippines: Capital Imports (US$bn)*
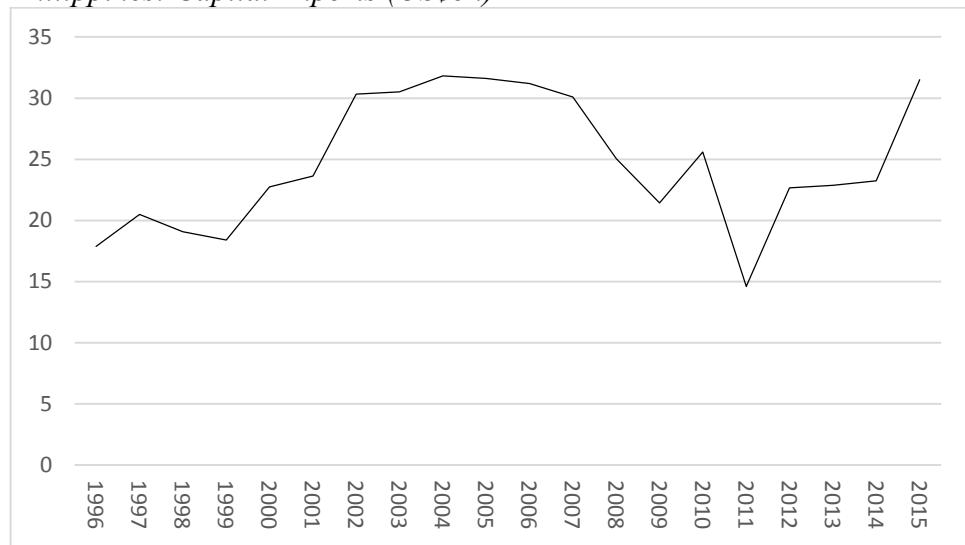
Figure B-3H
*Philippines: Intermediate Imports (US$bn)*
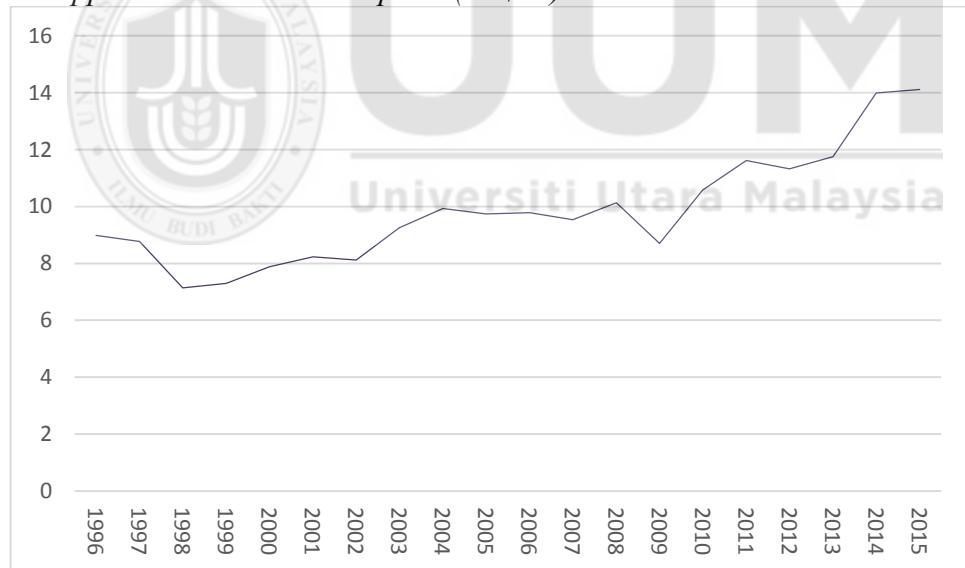
Figure B-3I
*Philippines: Consumption Imports (US$bn)*
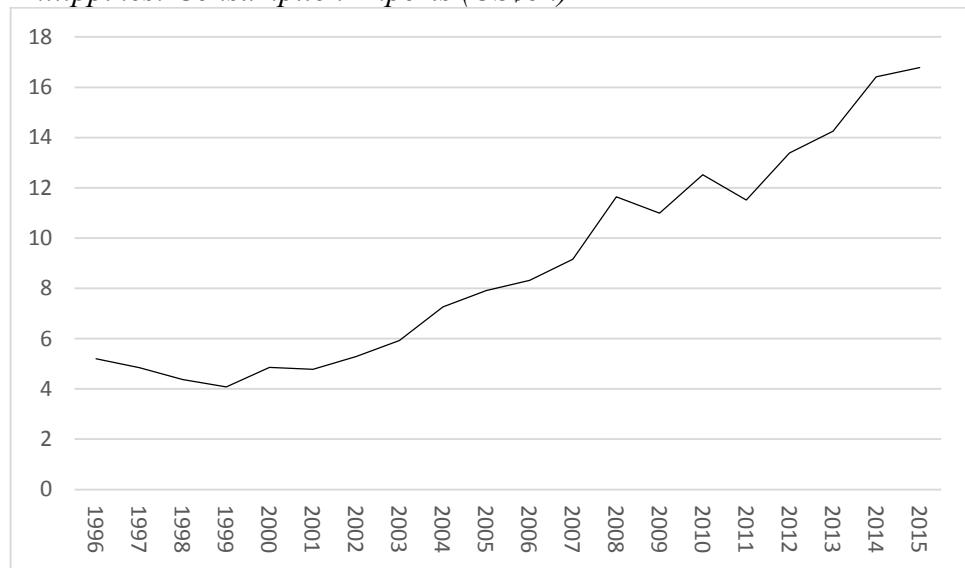
Figure B-3J
*Philippines: Capital Exports (US$bn)*
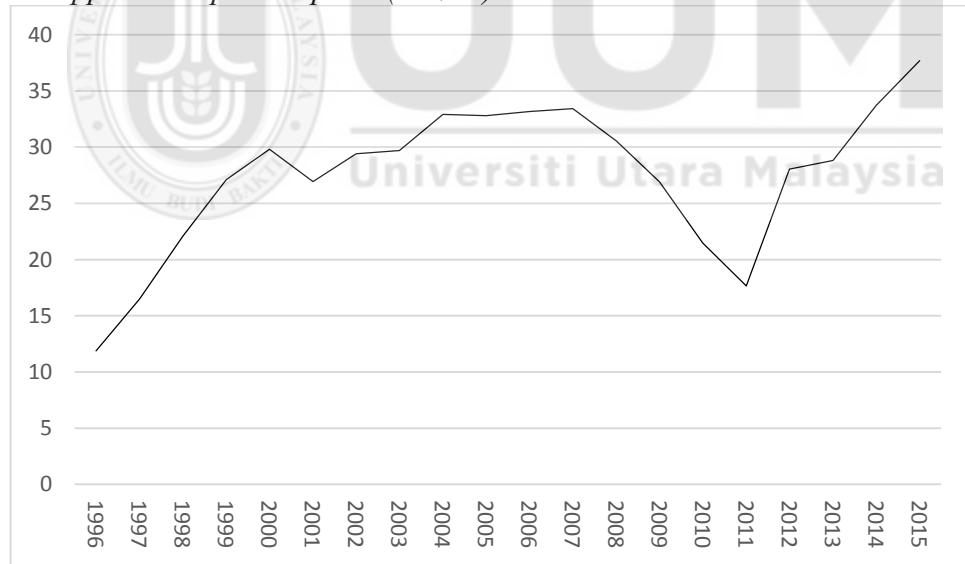
Figure B-3K
*Philippines Intermediate Exports (US$bn)*
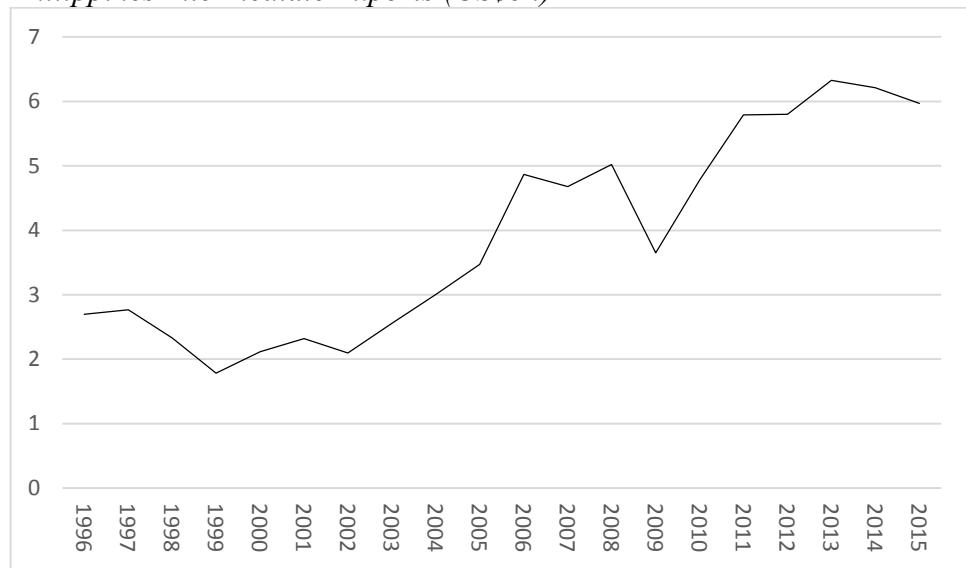
Figure B-3L
*Philippines: Consumption Exports (US$bn)*
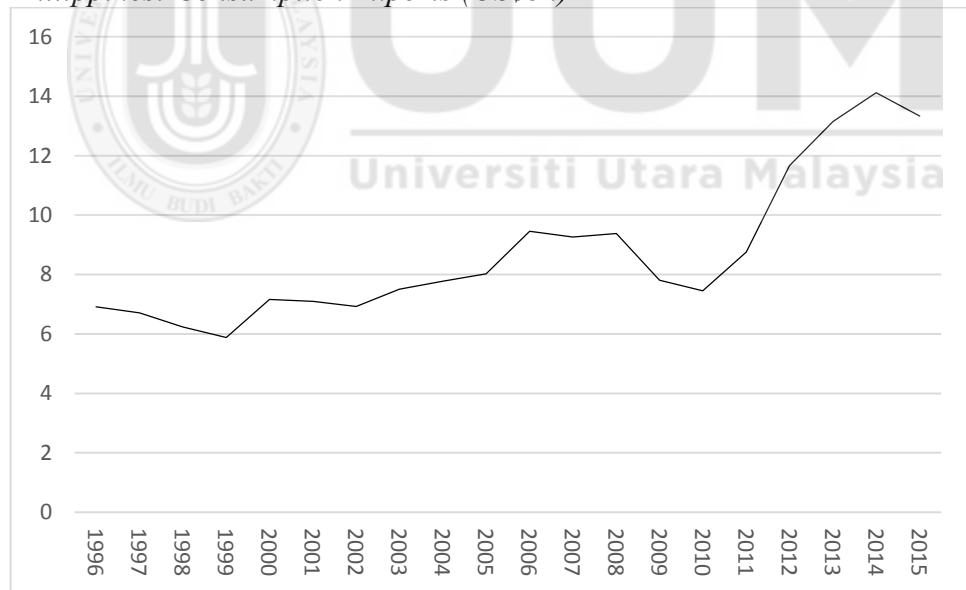
**Appendix C-4**

Figure B-4A
*Singapore: Private Consumption (US$bn)*
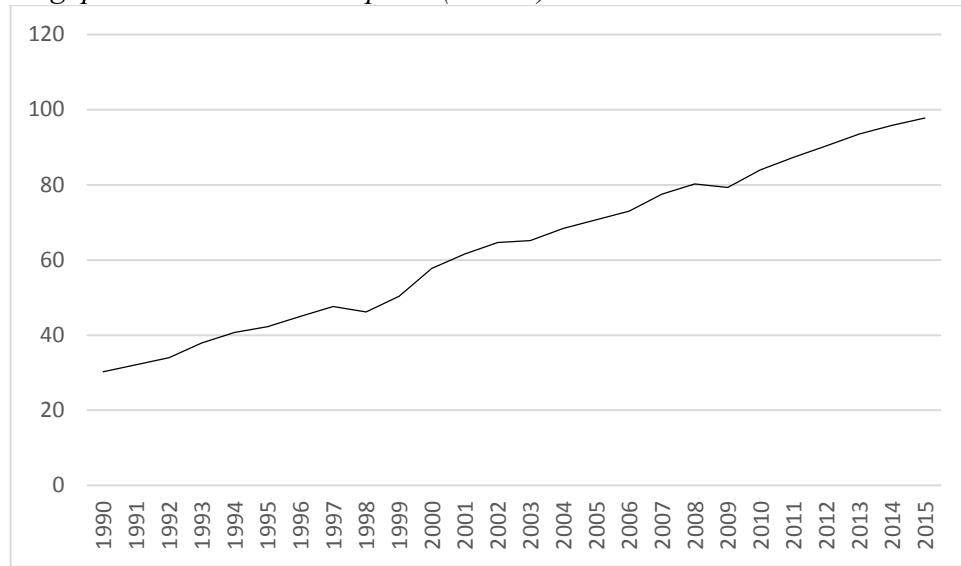
Figure B-4B
*Singapore: Public Consumption (US$bn)*
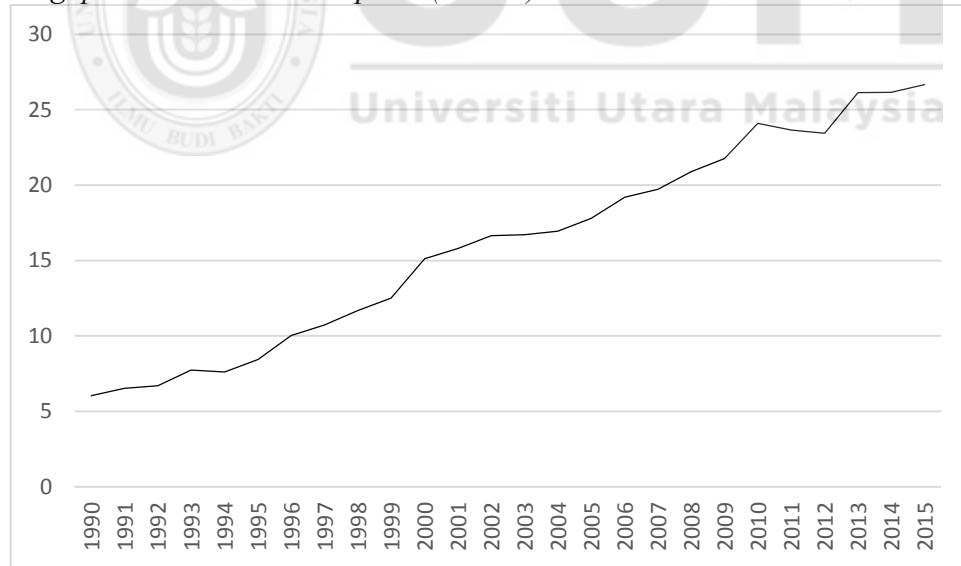
Figure B-4C
*Singapore: Gross Fixed Capital Formation (US$bn)*
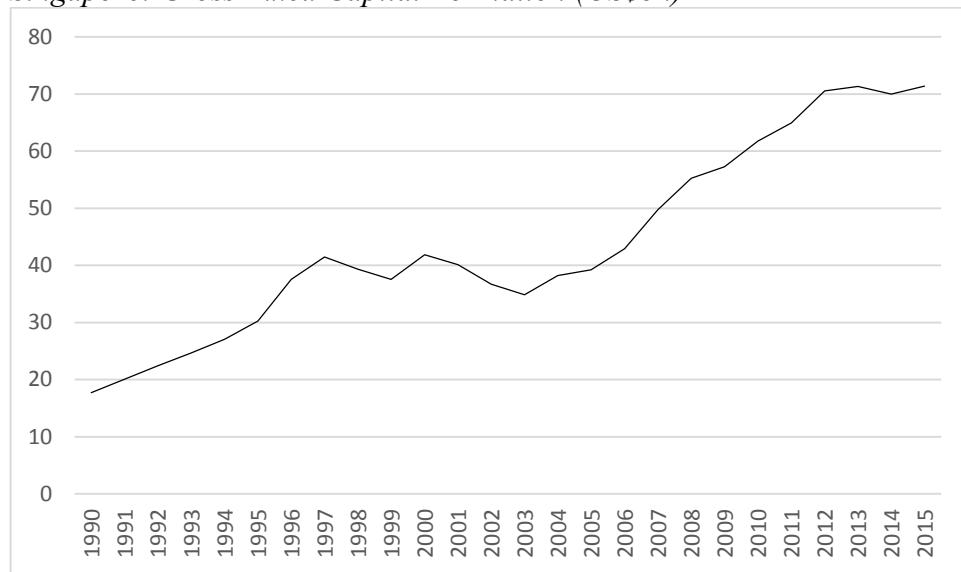
Figure B-4D
*Singapore: Exports (US$bn)*

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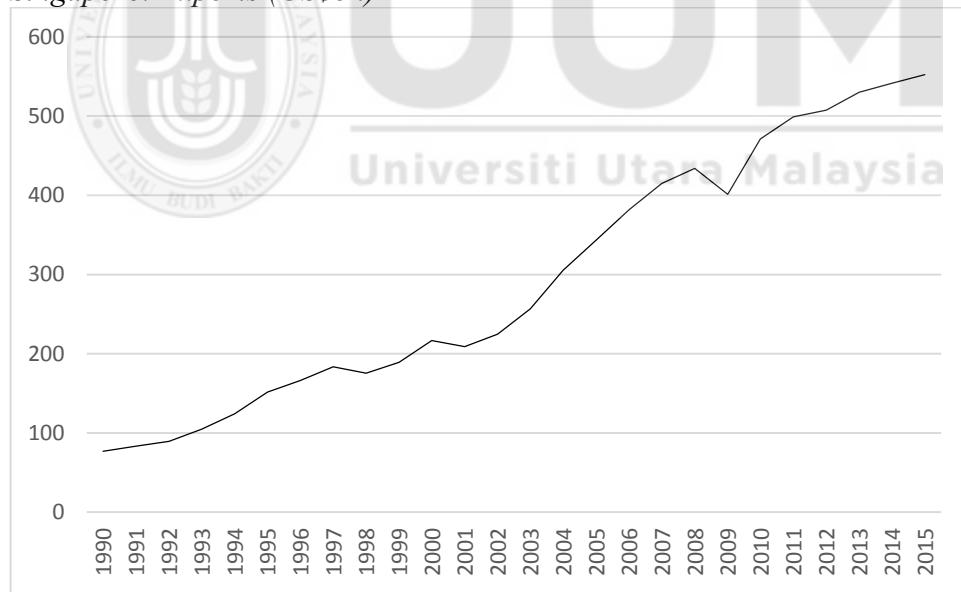
Figure B-4E
*Singapore: Imports (US$bn)*
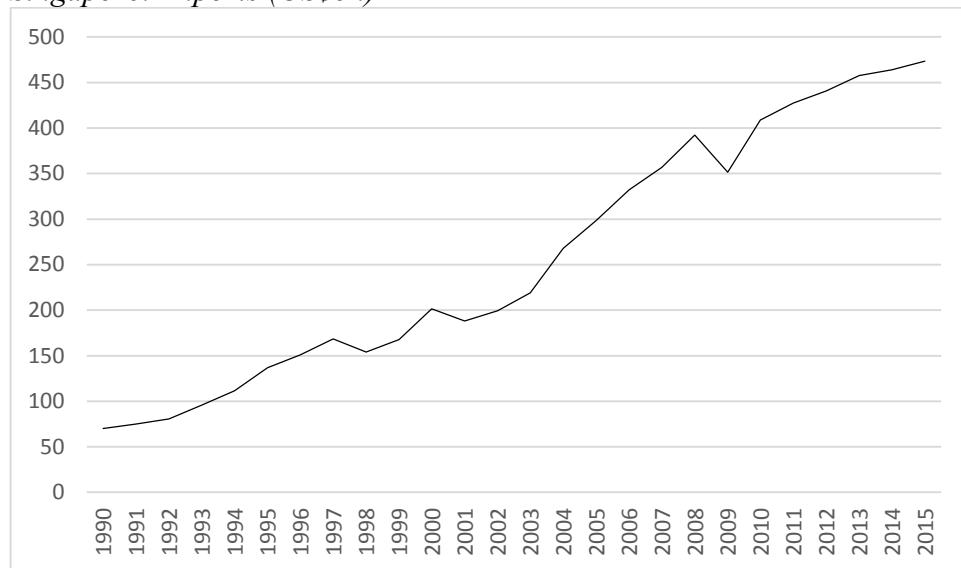
Figure B-4F
*Singapore: Services (US$bn)*

249
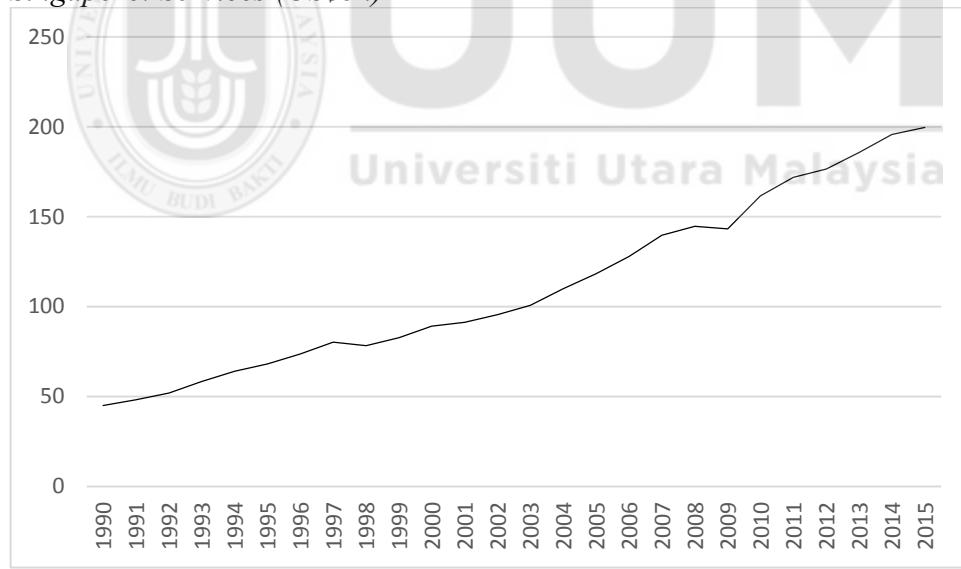
Figure B-4G
*Singapore: Capital Imports (US$bn)*
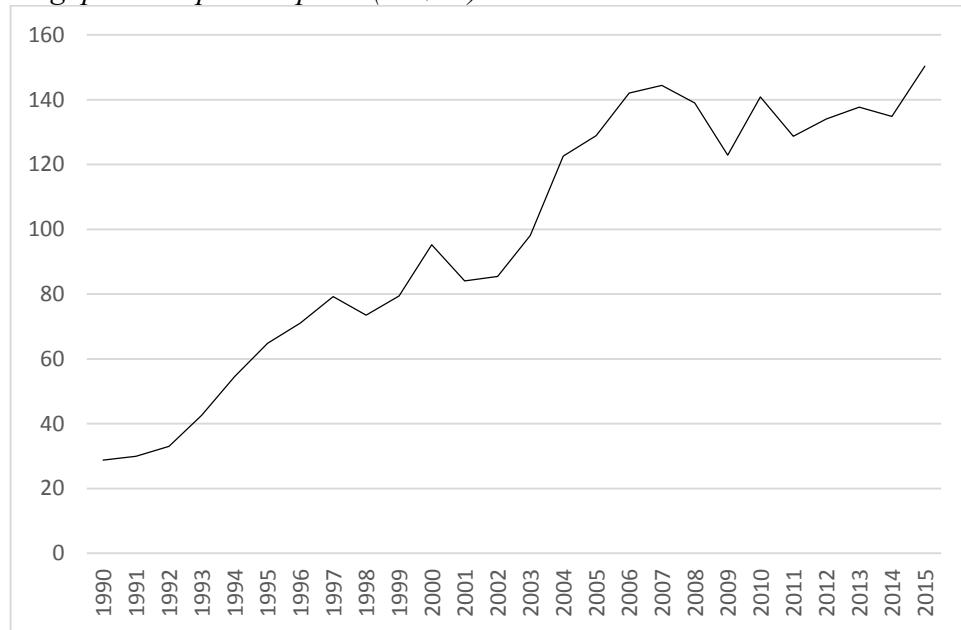


Source: Author

Figure B-4H
*Singapore: Intermediate Imports (US$bn)*



Source: Author

250

Figure B-4I
*Singapore: Consumption Imports (US$bn)*

Figure B-4J
*Singapore: Capital Exports (US$bn)*

251
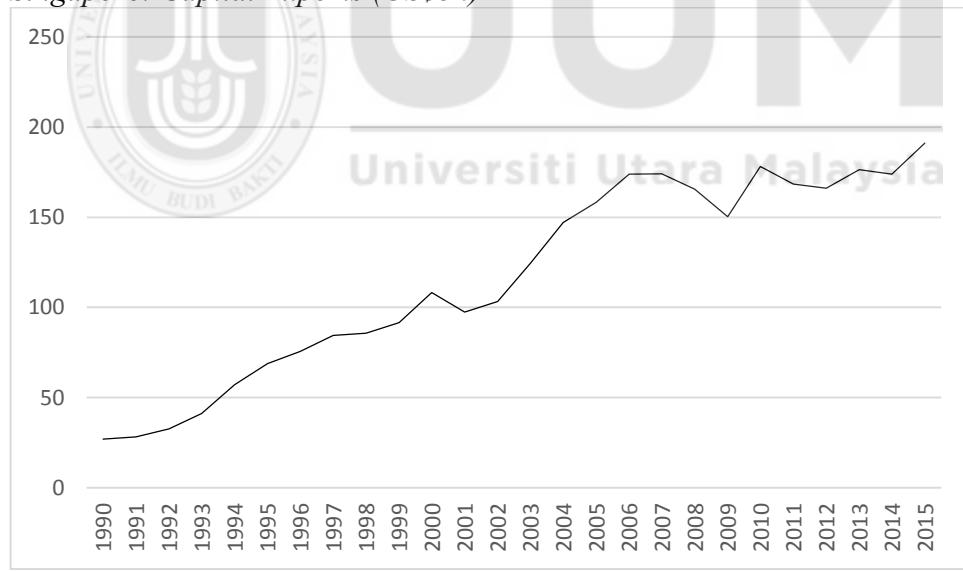
Figure B-4K
*Singapore: Intermediate Exports (US$bn)*
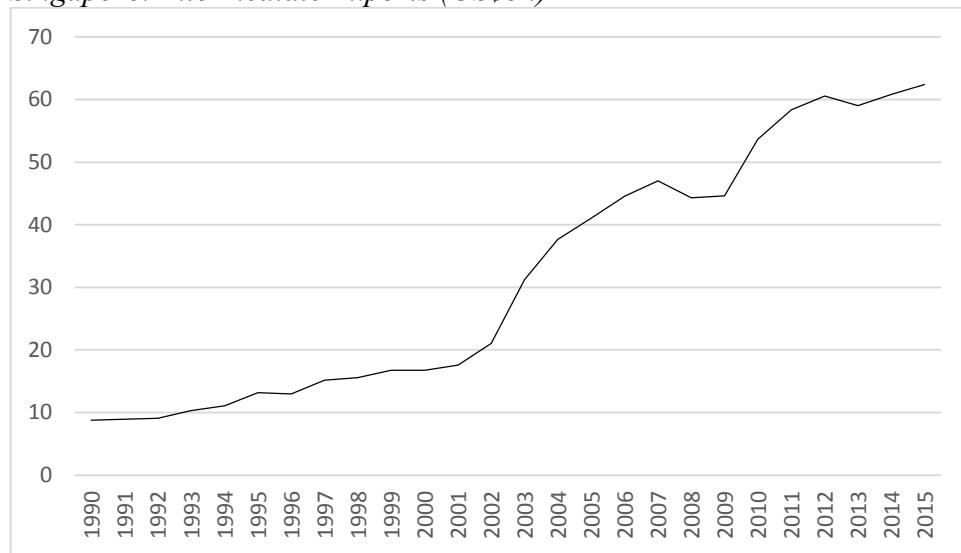
Figure B-4L
*Singapore: Consumption Exports (US$bn)*

252
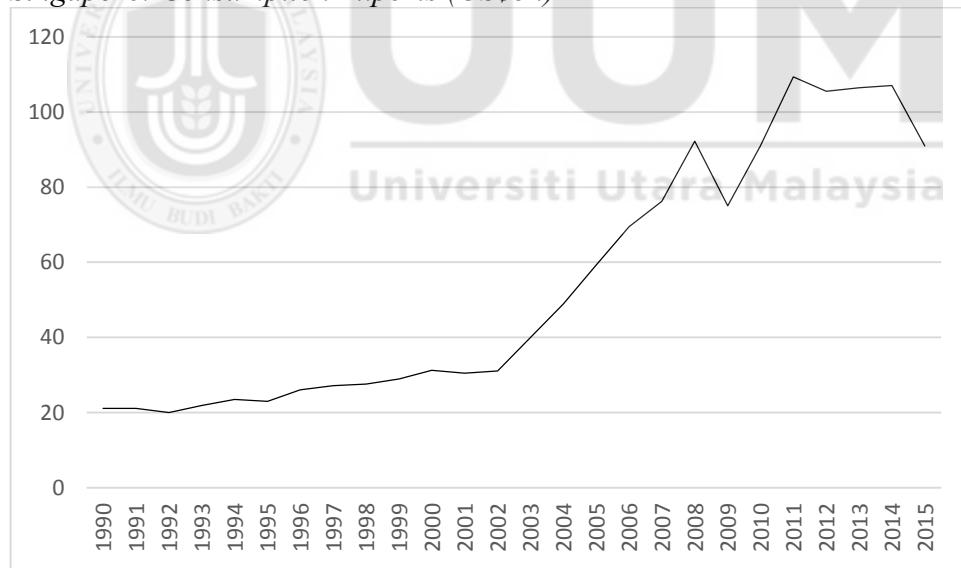
**Appendix C-5**

Figure B-5A
*Thailand: Private Consumption (US$)*
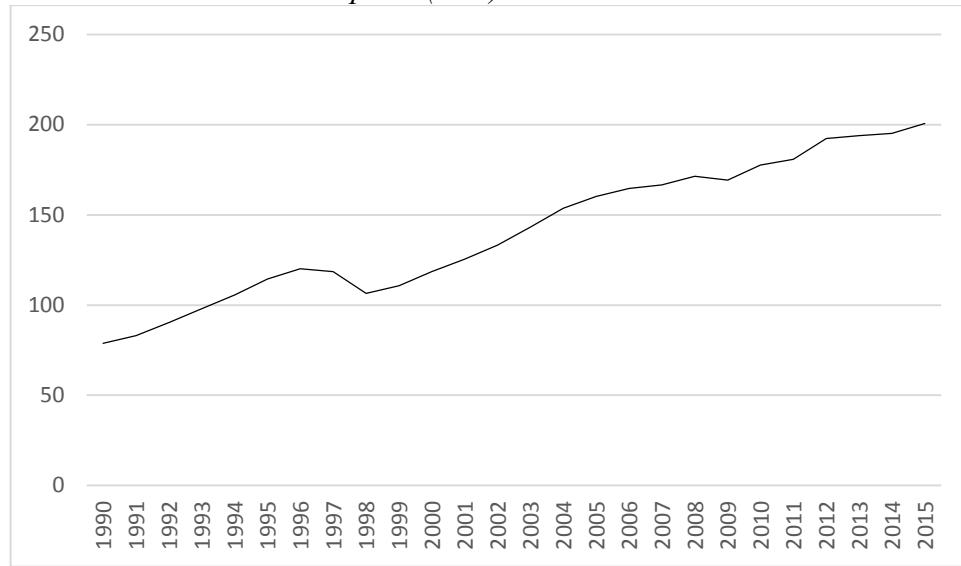
Figure B-5B
*Thailand: Public Consumption (US$)*
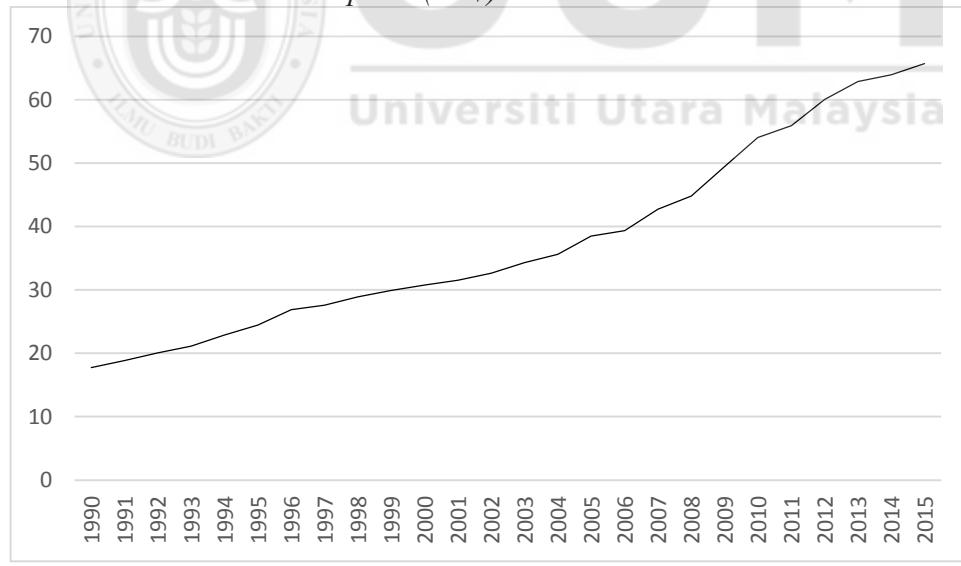
Figure B-5C
*Thailand:  Gross Fixed Capital Formation (US$)*
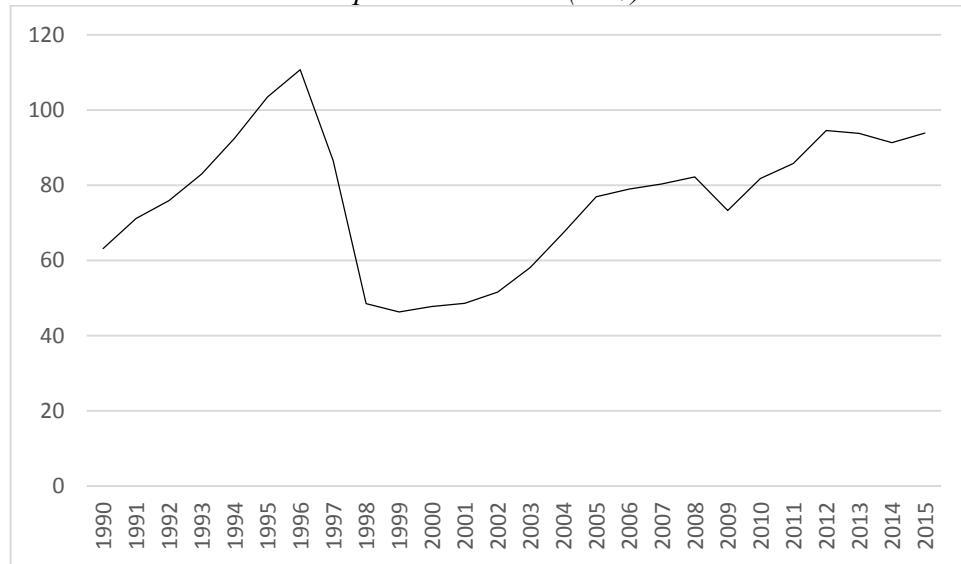
Figure B-5D
*Thailand:  Exports (US$)*
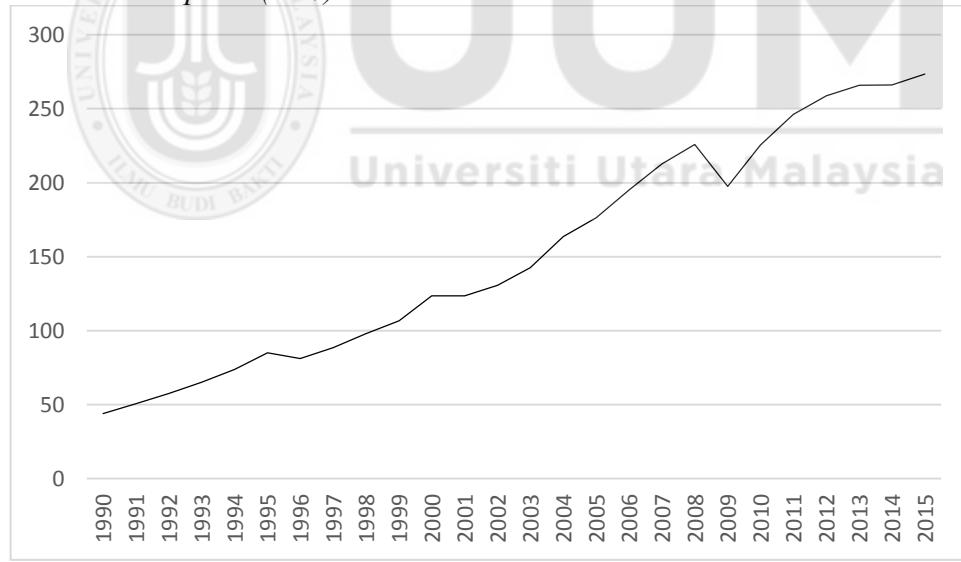
Figure B-5E
*Thailand:  Imports (US$)*
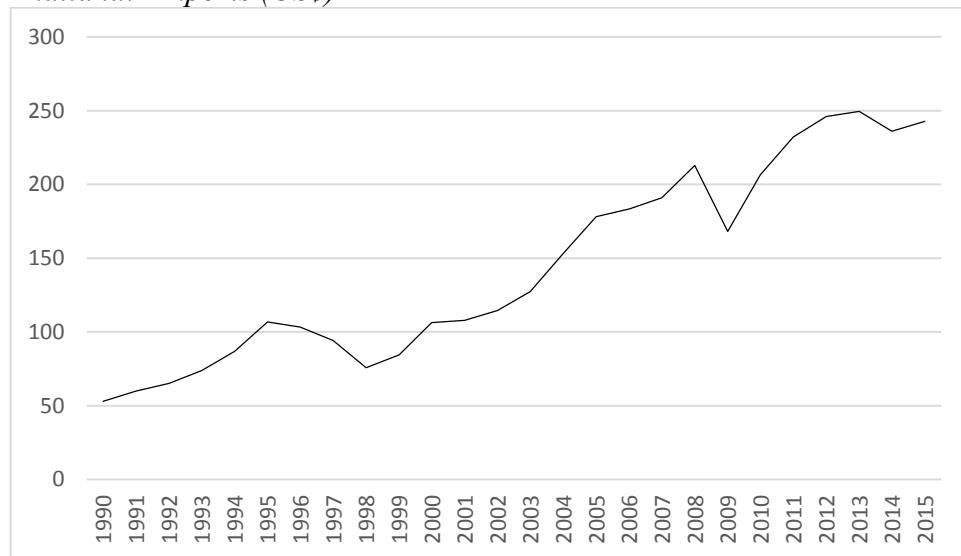
Figure B-5F
*Singapore: Services (US$)*

255
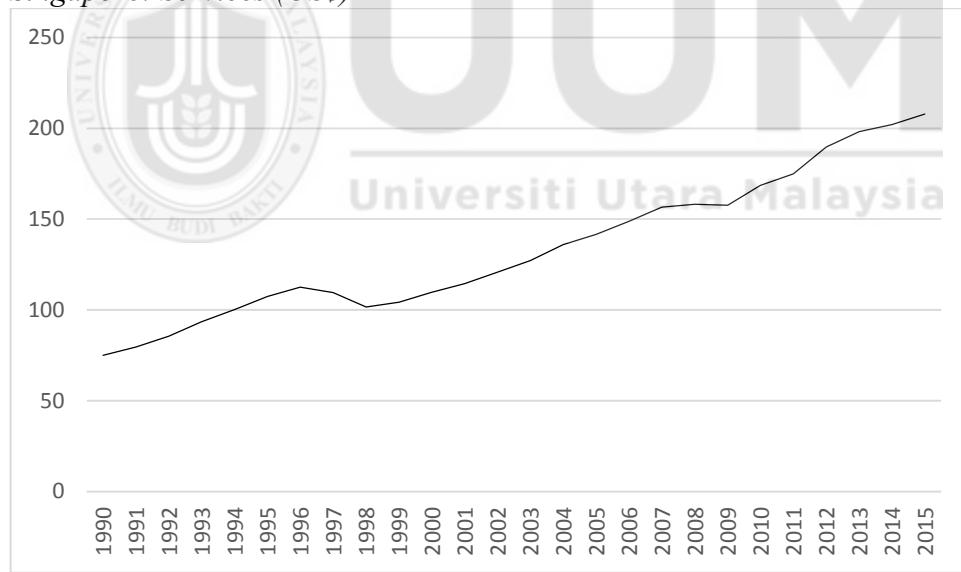
Figure B-5G
*Singapore: Capital Imports (US$)*
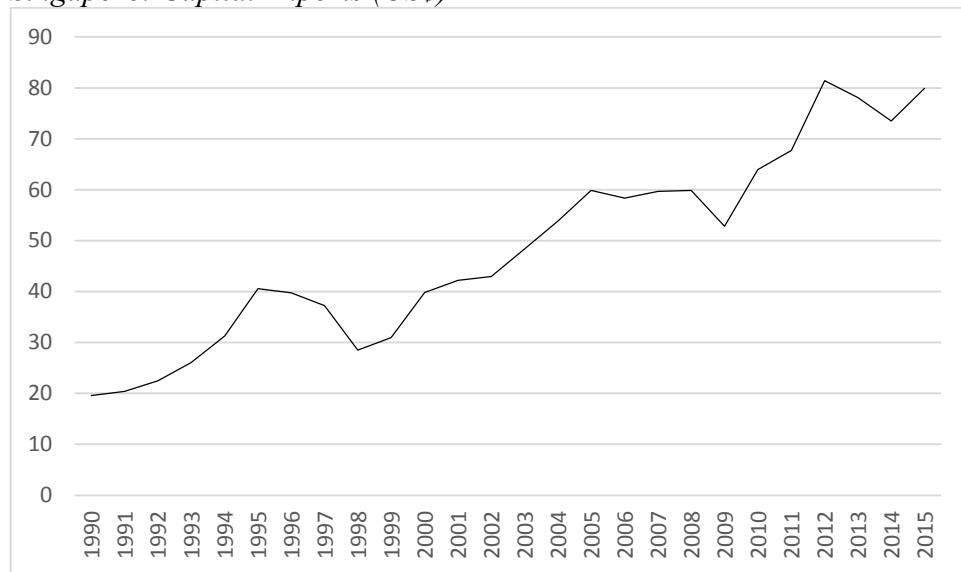


Source: Author

Figure B-5H
*Thailand: Intermediate Imports (US$)*
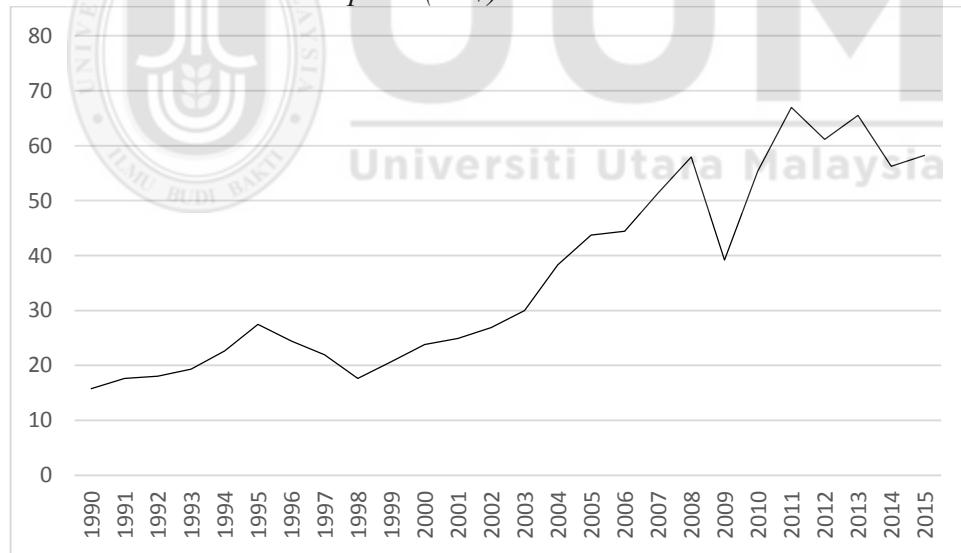


Source: Author

Figure B-5I
*Thailand:  Consumption Imports (US$)*
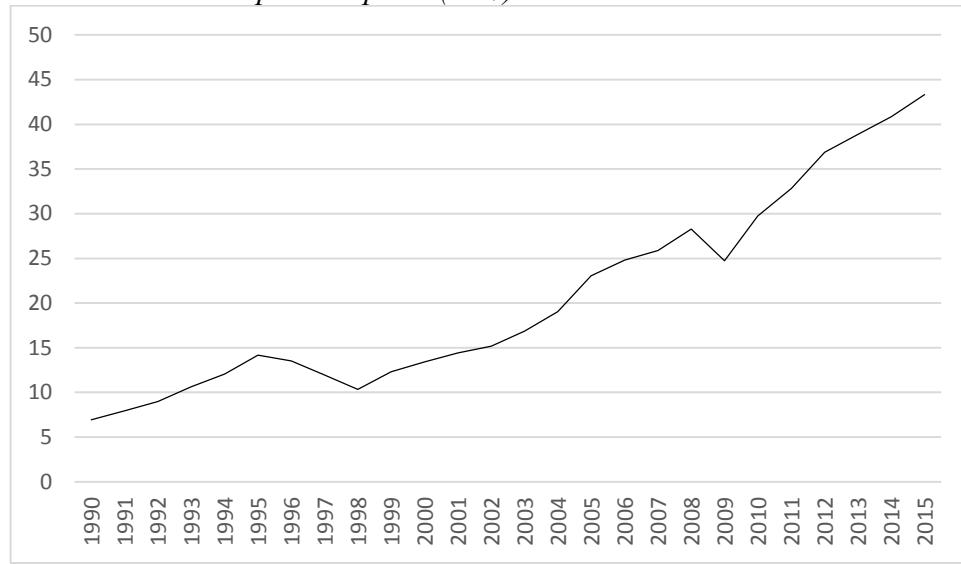
Figure B-5J
*Thailand:  Capital Exports (US$)*
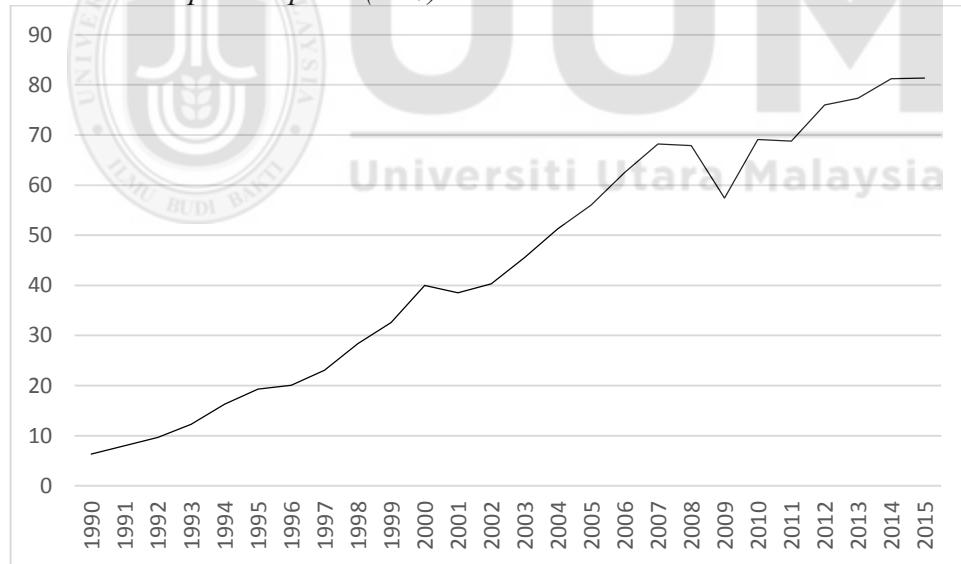
Figure B-5K
*Thailand: Intermediate Exports (US$)*
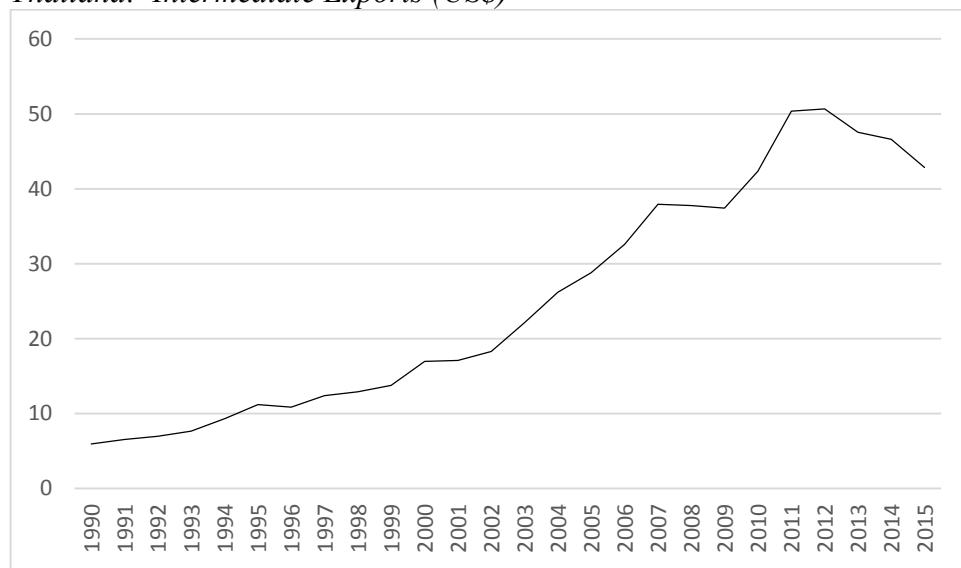
Figure B-5L
*Thailand: Consumption Exports (US$)*