

データ篇：5

第5章（植村）

(第5章附表) 推定された輸入関数 (候補)

下の表は、(A) 説明変数群の中に被説明変数の1期ラグ項を含むか含まないか、また、(B) 説明変数として輸入価格指数そのものを使うか国内価格との相対価格を使うか、の4通りの組合せを、以下の記号の組合せで表している。

表. 関数の構造

説明変数に被説明変数の1期ラグ項を		輸入価格	
含む	含まない	絶対	相対
1	0	1	0

後半のサマリー表中の数字は、1つのセルにつき1024通りの定式化のうち、符号条件を満たしたものの個数と、その中で最大のt値で符号条件を満たした定式化の数を示す。表中、「×」で示されているところは、その相手国と財の組み合わせでは符号条件を満たす定式化が見つからなかったことを表す。

なお、米国の対台湾・第3財の輸入関数について、最大t値の初期値をその他4か国と同様の4.0と高く設定してもなお多すぎる定式化が符号条件を満たす(ラグ項なし・相対輸入価格で29本、同・絶対輸入価格で14本)ため、米国のみについては初期値を6.0として計算を行い、候補を絞り込んだ(表はいずれも筆者作成)。

以下の表では、相手先・財別ごとに、「絶対輸入価格/相対輸入価格」及び「被説明変数のラグ項の有無」の4通りの組合せについて、統計的有意性の最大のものを表示する。各定式化の前の括弧内の数値はt値の有効数字である。一つの組合せについて0本以上5本以下の候補を提示するため、t値の刻み幅を0.01としたものが数通りある(米国の韓国からの第1財輸入など)。

(附表5-1) 輸入関数 (候補) 「中国」

【財1・絶対輸入価格】

(ラグ項なし)

- (1.8)  $M1JPN = f[ GDP, PM1LC, \Delta(JPNPX1/JPNPC1) ]$
- (1.8)  $M1JPN = f[ GDP, PM1LC, \Delta \log(JPNPX1/JPNPC1) ]$
- (1.8)  $M1JPN = f[ GDP, \log(PM1LC), \Delta(JPNPX1/JPNPC1) ]$
- (1.8)  $M1JPN = f[ GDP, \log(PM1LC), \Delta \log(JPNPX1/JPNPC1) ]$
- (1.5)  $\Delta(M1KOR) = f[ \Delta(GDP), \Delta \log(PM1LC), \Delta(KORPX1/KORPC1) ]$
- (1.1)  $M1TWN = f[ GDP, \Delta(PM1LC), \Delta(TWNPX1/TWNPC1) ]$
- (1.1)  $M1TWN = f[ GDP, \Delta(PM1LC), \Delta \log(TWNPX1/TWNPC1) ]$
- (1.1)  $M1TWN = f[ GDP, \Delta \log(PM1LC), \Delta(TWNPX1/TWNPC1) ]$
- (2.4)  $M1USA = f[ GDP, PM1LC, USAPX1/USAPC1 ]$
- (2.4)  $M1USA = f[ GDP, PM1LC, \log(USAPX1/USAPC1) ]$
- (2.4)  $M1USA = f[ GDP, \log(PM1LC), USAPX1/USAPC1 ]$
- (2.4)  $M1USA = f[ GDP, \log(PM1LC), \log(USAPX1/USAPC1) ]$

(ラグ項あり)

$$(1.0) M1JPN = f[ GDP, PM1LC, \Delta \log(JPNPX1/JPNPC1), M1JPN(-1) ]$$

$$(1.0) M1JPN = f[ GDP, \log(PM1LC), \Delta(JPNPX1/JPNPC1), M1JPN(-1) ]$$

$$(1.0) M1JPN = f[ GDP, \log(PM1LC), \Delta \log(JPNPX1/JPNPC1), M1JPN(-1) ]$$

$$(1.6) \log(M1KOR) = f[ \log(GDP), PM1LC, \Delta(KORPX1/KORPC1), \log(M1KOR(-1)) ]$$

$$(0.3) \log(M1TWN) = f[ \log(GDP), PM1LC, TWNPX1(-1)/TWNPC1(-1), \log(M1TWN(-1)) ]$$

$$(0.3) \log(M1TWN) = f[ \log(GDP), PM1LC, \log(TWNPX1(-1)/TWNPC1(-1)), \log(M1TWN(-1)) ]$$

$$(0.3) \log(M1TWN) = f[ \log(GDP), \Delta(PM1LC(-1)), TWNPX1(-1)/TWNPC1(-1), \log(M1TWN(-1)) ]$$

$$(0.3) \log(M1TWN) = f[ \log(GDP), \Delta(PM1LC(-1)), \log(TWNPX1(-1)/TWNPC1(-1)), \\ \log(M1TWN(-1)) ]$$

$$(0.3) \log(M1TWN) = f[ \log(GDP), \Delta \log(PM1LC(-1)), TWNPX1(-1)/TWNPC1(-1), \log(M1TWN(-1)) ]$$

$$(0.3) \log(M1TWN) = f[ \log(GDP), \Delta \log(PM1LC(-1)), \log(TWNPX1(-1)/TWNPC1(-1)), \\ \log(M1TWN(-1)) ]$$

$$(0.5) M1USA = f[ GDP, \Delta \log(PM1LC), USAPX1/USAPC1, M1USA(-1) ]$$

$$(0.5) M1USA = f[ GDP, \Delta \log(PM1LC), \log(USAPX1/USAPC1), M1USA(-1) ]$$

#### 【財 1・相対輸入価格】

(ラグ項なし)

$$(1.7) M1JPN = f[ GDP, \Delta \log(PM1LC(-1)/PGDP(-1)), \Delta \log(JPNPX1/JPNPC1) ]$$

$$(1.7) \log(M1KOR) = f[ \log(GDP), PM1LC/PGDP, \Delta(KORPX1/KORPC1) ]$$

$$(1.7) \Delta(M1KOR) = f[ \Delta(GDP), \Delta \log(PM1LC/PGDP), \Delta(KORPX1/KORPC1) ]$$

$$(3.0) M1TWN = f[ GDP, PM1LC/PGDP, TWNPX1/TWNPC1 ]$$

$$(3.0) M1TWN = f[ GDP, \log(PM1LC/PGDP), TWNPX1/TWNPC1 ]$$

$$(3.0) M1TWN = f[ GDP, \log(PM1LC/PGDP), \log(TWNPX1/TWNPC1) ]$$

$$(2.0) M1USA = f[ GDP, \Delta \log(PM1LC/PGDP), USAPX1/USAPC1 ]$$

$$(2.0) M1USA = f[ GDP, \Delta \log(PM1LC/PGDP), \log(USAPX1/USAPC1) ]$$

(ラグ項あり)

$$(1.2) M1JPN = f[ GDP, \Delta \log(PM1LC(-1)/PGDP(-1)), \Delta \log(JPNPX1/JPNPC1), M1JPN(-1) ]$$

$$(2.2) M1KOR = f[ GDP, \log(PM1LC/PGDP), \Delta(KORPX1/KORPC1), M1KOR(-1) ]$$

$$(2.2) M1KOR = f[ GDP, \log(PM1LC/PGDP), \Delta \log(KORPX1/KORPC1), M1KOR(-1) ]$$

$$(0.7) \log(M1TWN) = f[ \log(GDP), PM1LC/PGDP, TWNPX1/TWNPC1, \log(M1TWN(-1)) ]$$

$$(0.7) \log(M1TWN) = f[ \log(GDP), PM1LC/PGDP, \log(TWNPX1/TWNPC1), \log(M1TWN(-1)) ]$$

$$(1.1) M1USA = f[ GDP, \Delta(PM1LC/PGDP), USAPX1/USAPC1, M1USA(-1) ]$$

$$(1.1) M1USA = f[ GDP, \Delta(PM1LC/PGDP), \log(USAPX1/USAPC1), M1USA(-1) ]$$

$$(1.1) M1USA = f[ GDP, \Delta(PM1LC/PGDP), \Delta(USAPX1/USAPC1), M1USA(-1) ]$$

$$(1.1) M1USA = f[ GDP, \Delta(PM1LC/PGDP), \Delta \log(USAPX1/USAPC1), M1USA(-1) ]$$

#### 【財 3・絶対輸入価格】

(ラグ項なし)

$$(1.1) \log(M3JPN) = f[ \log(GDP), PM3LC, \Delta(JPNPX3/JPNPC3) ]$$

$$(1.1) \log(M3JPN) = f[ \log(GDP), PM3LC, \Delta \log(JPNPX3/JPNPC3) ]$$

$$(1.1) \log(M3JPN) = f[ \log(GDP), \log(PM3LC), \Delta(JPNPX3/JPNPC3) ]$$

- (1.1)  $\log(M3JPN) = f[\log(GDP), \log(PM3LC), \Delta\log(JPNPX3/JPNPC3)]$   
(0.3)  $M3KOR = f[GDP, PM3LC(-1), \Delta\log(KORPX3(-1)/KORPC3(-1))]$   
(0.3)  $M3KOR = f[GDP, \log(PM3LC(-1)), \Delta\log(KORPX3(-1)/KORPC3(-1))]$   
(0.3)  $M3KOR = f[GDP, \Delta(PM3LC(-1)), \Delta\log(KORPX3(-1)/KORPC3(-1))]$   
(0.3)  $M3KOR = f[GDP, \Delta\log(PM3LC(-1)), \Delta\log(KORPX3(-1)/KORPC3(-1))]$   
(0.3)  $\log(M3KOR) = f[\log(GDP), \Delta(PM3LC), KORPX3/KORPC3]$   
(1.1)  $\log(M3TWN) = f[\log(GDP), PM3LC, TWNPX3/TWNPC3]$   
(1.1)  $\log(M3TWN) = f[\log(GDP), PM3LC, TWNPX3(-1)/TWNPC3(-1)]$   
(1.2)  $\Delta\log(M3USA) = f[\Delta\log(GDP), \Delta\log(PM3LC), \Delta(USAPX3(-1)/USAPC3(-1))]$   
(1.2)  $\Delta\log(M3USA) = f[\Delta\log(GDP), \Delta\log(PM3LC), \Delta\log(USAPX3(-1)/USAPC3(-1))]$

(ラグ項あり)

- (0.5)  $\log(M3JPN) = f[\log(GDP), \log(PM3LC), \Delta(JPNPX3/JPNPC3), \log(M3JPN(-1))]$   
(0.5)  $\log(M3JPN) = f[\log(GDP), \log(PM3LC), \Delta\log(JPNPX3/JPNPC3), \log(M3JPN(-1))]$   
(1.5)  $\log(M3KOR) = f[\log(GDP), PM3LC, KORPX3(-1)/KORPC3(-1), \log(M3KOR(-1))]$   
(0.9)  $\Delta\log(M3TWN) = f[\Delta\log(GDP), \Delta(PM3LC), TWNPX3/TWNPC3, \Delta\log(M3TWN(-1))]$   
(0.9)  $\Delta\log(M3TWN) = f[\Delta\log(GDP), \Delta(PM3LC), TWNPX3(-1)/TWNPC3(-1), \Delta\log(M3TWN(-1))]$   
(0.9)  $\Delta\log(M3TWN) = f[\Delta\log(GDP), \Delta(PM3LC), \log(TWNPX3/TWNPC3), \Delta\log(M3TWN(-1))]$   
(0.9)  $\Delta\log(M3TWN) = f[\Delta\log(GDP), \Delta(PM3LC), \log(TWNPX3(-1)/TWNPC3(-1)), \Delta\log(M3TWN(-1))]$   
(0.9)  $\Delta\log(M3TWN) = f[\Delta\log(GDP), \Delta\log(PM3LC), TWNPX3/TWNPC3, \Delta\log(M3TWN(-1))]$   
(0.6)  $M3USA = f[GDP, \Delta(PM3LC), \log(USAPX3(-1)/USAPC3(-1)), M3USA(-1)]$

### 【財 3・相対輸入価格】

(ラグ項なし)

- (1.0)  $\log(M3JPN) = f[\log(GDP), \log(PM3LC/PGDP), \Delta(JPNPX3/JPNPC3)]$   
(1.0)  $\log(M3JPN) = f[\log(GDP), \log(PM3LC/PGDP), \Delta\log(JPNPX3/JPNPC3)]$   
(1.7)  $\log(M3KOR) = f[\log(GDP), PM3LC/PGDP, KORPX3/KORPC3]$   
(1.5)  $\log(M3TWN) = f[\log(GDP), \log(PM3LC/PGDP), TWNPX3/TWNPC3]$   
(1.5)  $\log(M3TWN) = f[\log(GDP), \log(PM3LC/PGDP), TWNPX3(-1)/TWNPC3(-1)]$   
(1.0)  $\log(M3USA) = f[\log(GDP), PM3LC/PGDP, USAPX3/USAPC3]$   
(1.0)  $\log(M3USA) = f[\log(GDP), PM3LC/PGDP, \log(USAPX3/USAPC3)]$   
(1.0)  $\Delta\log(M3USA) = f[\Delta\log(GDP), \Delta(PM3LC/PGDP), \Delta(USAPX3(-1)/USAPC3(-1))]$   
(1.0)  $\Delta\log(M3USA) = f[\Delta\log(GDP), \Delta(PM3LC/PGDP), \Delta\log(USAPX3(-1)/USAPC3(-1))]$

(ラグ項あり)

- (0.6)  $\log(M3JPN) = f[\log(GDP), PM3LC/PGDP, \Delta(JPNPX3/JPNPC3), \log(M3JPN(-1))]$   
(0.6)  $\log(M3JPN) = f[\log(GDP), PM3LC/PGDP, \Delta\log(JPNPX3/JPNPC3), \log(M3JPN(-1))]$   
(1.5)  $\log(M3KOR) = f[\log(GDP), PM3LC/PGDP, KORPX3(-1)/KORPC3(-1), \log(M3KOR(-1))]$   
(1.5)  $\log(M3KOR) = f[\log(GDP), PM3LC/PGDP, \log(KORPX3(-1)/KORPC3(-1)), \log(M3KOR(-1))]$   
(1.5)  $\log(M3KOR) = f[\log(GDP), \Delta(PM3LC/PGDP), KORPX3(-1)/KORPC3(-1), \log(M3KOR(-1))]$   
(0.6)  $\Delta\log(M3TWN) = f[\Delta\log(GDP), \Delta\log(PM3LC/PGDP), TWNPX3/TWNPC3,$

- $\Delta \log(M3TWN(-1)) ]$   
 (0.6)  $\Delta \log(M3TWN) = f[ \Delta \log(GDP), \Delta \log(PM3LC/PGDP), TWNPX3(-1)/TWNPC3(-1), \Delta \log(M3TWN(-1)) ]$   
 (0.3)  $M3USA = f[ GDP, \Delta \log(PM3LC/PGDP), \log(USAPX3(-1)/USAPC3(-1)), M3USA(-1) ]$

(附表 5 - 2) 輸入関数 (候補) 「日本」

**【財 1・絶対輸入価格】**

(ラグ項なし)

- (0.8)  $\Delta \log(M1CHN) = f[ \Delta \log(GDP), \log(PM1LC), CHNPX1(-1)/CHNPC1(-1) ]$   
 (0.8)  $\Delta \log(M1CHN) = f[ \Delta \log(GDP), \log(PM1LC), \log(CHNPX1(-1)/CHNPC1(-1)) ]$   
 (2.1)  $\Delta \log(M1KOR) = f[ \Delta \log(GDP), \Delta \log(PM1LC), KORPX1(-1)/KORPC1(-1) ]$   
 (2.1)  $\Delta \log(M1TWN) = f[ \Delta \log(GDP), \Delta \log(PM1LC), \log(TWNPX1(-1)/TWNPC1(-1)) ]$   
 (1.9)  $\log(M1USA) = f[ \log(GDP), \log(PM1LC), USAPX1/USAPC1 ]$

(ラグ項あり)

- (0.7)  $\log(M1CHN) = f[ \log(GDP), \log(PM1LC), \Delta(CHNPX1(-1)/CHNPC1(-1)), \log(M1CHN(-1)) ]$   
 (0.7)  $\log(M1CHN) = f[ \log(GDP), \log(PM1LC), \Delta \log(CHNPX1(-1)/CHNPC1(-1)), \log(M1CHN(-1)) ]$   
 (1.8)  $\Delta \log(M1KOR) = f[ \Delta \log(GDP), \Delta \log(PM1LC), KORPX1(-1)/KORPC1(-1), \Delta \log(M1KOR(-1)) ]$   
 (1.3)  $\Delta \log(M1TWN) = f[ \Delta \log(GDP), \Delta \log(PM1LC), \Delta(TWNPX1(-1)/TWNPC1(-1)), \Delta \log(M1TWN(-1)) ]$   
 (0.9)  $M1USA = f[ GDP, \Delta \log(PM1LC), USAPX1/USAPC1, M1USA(-1) ]$   
 (0.9)  $M1USA = f[ GDP, \Delta \log(PM1LC), \log(USAPX1/USAPC1), M1USA(-1) ]$

**【財 1・相対輸入価格】**

(ラグ項なし)

- (0.5)  $\Delta \log(M1CHN) = f[ \Delta \log(GDP), \log(PM1LC/PGDP), CHNPX1(-1)/CHNPC1(-1) ]$   
 (0.5)  $\Delta \log(M1CHN) = f[ \Delta \log(GDP), \log(PM1LC/PGDP), \log(CHNPX1(-1)/CHNPC1(-1)) ]$   
 (0.5)  $\Delta \log(M1CHN) = f[ \Delta \log(GDP), \Delta \log(PM1LC/PGDP), \Delta(CHNPX1(-1)/CHNPC1(-1)) ]$   
 (0.5)  $\Delta \log(M1CHN) = f[ \Delta \log(GDP), \Delta \log(PM1LC/PGDP), \Delta \log(CHNPX1(-1)/CHNPC1(-1)) ]$   
 (2.4)  $\Delta \log(M1KOR) = f[ \Delta \log(GDP), \Delta \log(PM1LC/PGDP), KORPX1(-1)/KORPC1(-1) ]$   
 (1.7)  $\Delta \log(M1TWN) = f[ \Delta \log(GDP), \Delta \log(PM1LC/PGDP), \log(TWNPX1(-1)/TWNPC1(-1)) ]$   
 (1.0)  $\log(M1USA) = f[ \log(GDP), \Delta \log(PM1LC/PGDP), USAPX1/USAPC1 ]$   
 (1.0)  $\log(M1USA) = f[ \log(GDP), \Delta \log(PM1LC/PGDP), \log(USAPX1/USAPC1) ]$

(ラグ項あり)

- (0.3)  $\log(M1CHN) = f[ \log(GDP), \Delta(PM1LC(-1)/PGDP(-1)), CHNPX1(-1)/CHNPC1(-1), \log(M1CHN(-1)) ]$   
 (0.3)  $\log(M1CHN) = f[ \log(GDP), \Delta(PM1LC(-1)/PGDP(-1)), \Delta(CHNPX1(-1)/CHNPC1(-1)), \log(M1CHN(-1)) ]$   
 (0.3)  $\log(M1CHN) = f[ \log(GDP), \Delta \log(PM1LC(-1)/PGDP(-1)), CHNPX1(-1)/CHNPC1(-1), \log(M1CHN(-1)) ]$

- (0.3)  $\log(M1CHN) = f[\log(GDP), \Delta\log(PM1LC(-1)/PGDP(-1)), \Delta(CHNPX1(-1)/CHNPC1(-1)), \log(M1CHN(-1))]$
- (1.7)  $\Delta\log(M1KOR) = f[\Delta\log(GDP), \Delta\log(PM1LC/PGDP), KORPX1(-1)/KORPC1(-1), \Delta\log(M1KOR(-1))]$
- (1.7)  $\Delta\log(M1KOR) = f[\Delta\log(GDP), \Delta\log(PM1LC/PGDP), \log(KORPX1(-1)/KORPC1(-1)), \Delta\log(M1KOR(-1))]$
- (1.1)  $\Delta\log(M1TWN) = f[\Delta\log(GDP), \Delta\log(PM1LC/PGDP), \Delta(TWNPX1(-1)/TWNPC1(-1)), \Delta\log(M1TWN(-1))]$
- (1.0)  $M1USA = f[GDP, \Delta\log(PM1LC/PGDP), USAPX1/USAPC1, M1USA(-1)]$
- (1.0)  $M1USA = f[GDP, \Delta\log(PM1LC/PGDP), \log(USAPX1/USAPC1), M1USA(-1)]$

**【財 3・絶対輸入価格】**

(ラグ項なし)

- (2.0)  $\Delta(M3CHN) = f[\Delta(GDP), \log(PM3LC), CHNPX3(-1)/CHNPC3(-1)]$
- (2.0)  $\Delta(M3CHN) = f[\Delta(GDP), \log(PM3LC), \log(CHNPX3(-1)/CHNPC3(-1))]$
- (1.4)  $\Delta(M3KOR) = f[\Delta(GDP), PM3LC(-1), KORPX3(-1)/KORPC3(-1)]$
- (1.4)  $\Delta(M3KOR) = f[\Delta(GDP), \log(PM3LC), KORPX3(-1)/KORPC3(-1)]$
- (1.4)  $\Delta(M3KOR) = f[\Delta(GDP), \log(PM3LC(-1)), KORPX3(-1)/KORPC3(-1)]$
- (3.7)  $\Delta\log(M3TWN) = f[\Delta\log(GDP), \Delta(PM3LC(-1)), \Delta\log(TWNPX3(-1)/TWNPC3(-1))]$
- (1.2)  $\Delta(M3USA) = f[\Delta(GDP), PM3LC(-1), USAPX3/USAPC3]$
- (1.2)  $\Delta(M3USA) = f[\Delta(GDP), PM3LC(-1), \log(USAPX3/USAPC3)]$
- (1.2)  $\Delta(M3USA) = f[\Delta(GDP), \log(PM3LC(-1)), USAPX3/USAPC3]$
- (1.2)  $\Delta(M3USA) = f[\Delta(GDP), \log(PM3LC(-1)), \log(USAPX3/USAPC3)]$

(ラグ項あり)

- (1.9)  $\Delta(M3CHN) = f[\Delta(GDP), PM3LC, CHNPX3(-1)/CHNPC3(-1), \Delta(M3CHN(-1))]$
- (1.9)  $\Delta(M3CHN) = f[\Delta(GDP), PM3LC, \log(CHNPX3(-1)/CHNPC3(-1)), \Delta(M3CHN(-1))]$
- (1.9)  $\Delta(M3CHN) = f[\Delta(GDP), \log(PM3LC), CHNPX3(-1)/CHNPC3(-1), \Delta(M3CHN(-1))]$
- (1.9)  $\Delta(M3CHN) = f[\Delta(GDP), \log(PM3LC), \log(CHNPX3(-1)/CHNPC3(-1)), \Delta(M3CHN(-1))]$
- (1.2)  $\log(M3KOR) = f[\log(GDP), \Delta(PM3LC(-1)), \Delta\log(KORPX3(-1)/KORPC3(-1)), \log(M3KOR(-1))]$
- (1.8)  $\Delta\log(M3TWN) = f[\Delta\log(GDP), \Delta(PM3LC), \Delta\log(TWNPX3(-1)/TWNPC3(-1)), \Delta\log(M3TWN(-1))]$
- (1.2)  $\Delta(M3USA) = f[\Delta(GDP), \Delta\log(PM3LC), USAPX3/USAPC3, \Delta(M3USA(-1))]$
- (1.2)  $\Delta(M3USA) = f[\Delta(GDP), \Delta\log(PM3LC), \log(USAPX3/USAPC3), \Delta(M3USA(-1))]$

**【財 3・相対輸入価格】**

(ラグ項なし)

- (1.8)  $M3CHN = f[GDP, \Delta(PM3LC/PGDP), CHNPX3/CHNPC3]$
- (1.8)  $M3CHN = f[GDP, \Delta(PM3LC/PGDP), \log(CHNPX3/CHNPC3)]$
- (1.8)  $\Delta(M3CHN) = f[\Delta(GDP), PM3LC/PGDP, CHNPX3(-1)/CHNPC3(-1)]$
- (1.8)  $\Delta(M3CHN) = f[\Delta(GDP), PM3LC/PGDP, \log(CHNPX3(-1)/CHNPC3(-1))]$
- (1.8)  $\Delta(M3CHN) = f[\Delta(GDP), \log(PM3LC/PGDP), \log(CHNPX3(-1)/CHNPC3(-1))]$

- (1.4)  $\Delta(M3KOR) = f[\Delta(GDP), \log(PM3LC/PGDP), KORPX3(-1)/KORPC3(-1)]$   
 (1.4)  $\Delta(M3KOR) = f[\Delta(GDP), \log(PM3LC(-1)/PGDP(-1)), KORPX3(-1)/KORPC3(-1)]$   
 (1.4)  $\Delta\log(M3KOR) = f[\Delta\log(GDP), \Delta(PM3LC(-1)/PGDP(-1)), KORPX3(-1)/KORPC3(-1)]$   
 (1.4)  $\Delta\log(M3KOR) = f[\Delta\log(GDP), \Delta(PM3LC(-1)/PGDP(-1)), \log(KORPX3(-1)/KORPC3(-1))] ]$   
 (3.2)  $\Delta\log(M3TWN) = f[\Delta\log(GDP), \Delta(PM3LC/PGDP), \Delta\log(TWNPX3(-1)/TWNPC3(-1))] ]$   
 (1.6)  $\Delta\log(M3USA) = f[\Delta\log(GDP), \Delta\log(PM3LC/PGDP), USAPX3(-1)/USAPC3(-1)]$

(ラグ項あり)

- (2.5)  $\Delta(M3CHN) = f[\Delta(GDP), PM3LC/PGDP, CHNPX3(-1)/CHNPC3(-1), \Delta(M3CHN(-1))] ]$   
 (2.5)  $\Delta(M3CHN) = f[\Delta(GDP), PM3LC/PGDP, \log(CHNPX3(-1)/CHNPC3(-1)), \Delta(M3CHN(-1))] ]$   
 (1.4)  $\log(M3KOR) = f[\log(GDP), \Delta(PM3LC(-1)/PGDP(-1)), \log(KORPX3(-1)/KORPC3(-1)), \log(M3KOR(-1))] ]$   
 (1.5)  $\log(M3TWN) = f[\log(GDP), \Delta\log(PM3LC(-1)/PGDP(-1)), \Delta\log(TWNPX3(-1)/TWNPC3(-1)), \log(M3TWN(-1))] ]$   
 (1.4)  $\Delta\log(M3USA) = f[\Delta\log(GDP), \Delta\log(PM3LC/PGDP), USAPX3/USAPC3, \Delta\log(M3USA(-1))] ]$   
 (1.4)  $\Delta\log(M3USA) = f[\Delta\log(GDP), \Delta\log(PM3LC/PGDP), \log(USAPX3/USAPC3), \Delta\log(M3USA(-1))] ]$

(附表5-3) 輸入関数 (候補) 「韓国」

**【財1・絶対輸入価格】**

(ラグ項なし)

- (2.4)  $\log(M1CHN) = f[\log(GDP), \Delta(PM1LC), CHNPX1(-1)/CHNPC1(-1)]$   
 (1.8)  $\Delta(M1JPN) = f[\Delta(GDP), \Delta(PM1LC), JPNPX1/JPNPC1]$   
 (1.8)  $\Delta(M1JPN) = f[\Delta(GDP), \Delta\log(PM1LC), JPNPX1/JPNPC1]$   
 (1.8)  $\Delta(M1JPN) = f[\Delta(GDP), \Delta\log(PM1LC), \log(JPNPX1/JPNPC1)]$   
 (1.1)  $\Delta(M1TWN) = f[\Delta(GDP), \Delta\log(PM1LC), \log(TWNPX1(-1)/TWNPC1(-1))] ]$   
 (2.5)  $\log(M1USA) = f[\log(GDP), PM1LC, USAPX1(-1)/USAPC1(-1)]$

(ラグ項あり)

- (1.7)  $\log(M1CHN) = f[\log(GDP), \Delta\log(PM1LC), CHNPX1(-1)/CHNPC1(-1), \log(M1CHN(-1))] ]$   
 (1.6)  $M1JPN = f[GDP, \Delta(PM1LC), JPNPX1/JPNPC1, M1JPN(-1)]$   
 (1.6)  $M1JPN = f[GDP, \Delta\log(PM1LC), JPNPX1/JPNPC1, M1JPN(-1)]$   
 (1.6)  $M1JPN = f[GDP, \Delta\log(PM1LC), \log(JPNPX1/JPNPC1), M1JPN(-1)]$   
 (1.9)  $\log(M1TWN) = f[\log(GDP), PM1LC, TWNPX1(-1)/TWNPC1(-1), \log(M1TWN(-1))] ]$   
 (1.3)  $M1USA = f[GDP, PM1LC, USAPX1/USAPC1, M1USA(-1)]$   
 (1.3)  $M1USA = f[GDP, PM1LC, \log(USAPX1/USAPC1), M1USA(-1)]$

**【財1・相対輸入価格】**

(ラグ項なし)

- (2.0)  $M1CHN = f[GDP, \log(PM1LC/PGDP), CHNPX1(-1)/CHNPC1(-1)]$   
 (2.0)  $\log(M1CHN) = f[\log(GDP), \Delta(PM1LC/PGDP), CHNPX1(-1)/CHNPC1(-1)]$   
 (2.0)  $\log(M1CHN) = f[\log(GDP), \Delta(PM1LC/PGDP), \log(CHNPX1(-1)/CHNPC1(-1))] ]$

- (2.0)  $\log(M1CHN) = f[ \log(GDP), \Delta\log(PM1LC/PGDP), CHNPX1(-1)/CHNPC1(-1) ]$   
 (2.0)  $\log(M1CHN) = f[ \log(GDP), \Delta\log(PM1LC/PGDP), \log(CHNPX1(-1)/CHNPC1(-1)) ]$   
 (1.7)  $\Delta(M1JPN) = f[ \Delta(GDP), \Delta\log(PM1LC/PGDP), \Delta(JPNPX1/JPNPC1) ]$   
 (2.0)  $\log(M1TWN) = f[ \log(GDP), PM1LC/PGDP, \log(TWNPX1(-1)/TWNPC1(-1)) ]$   
 (1.7)  $\log(M1USA) = f[ \log(GDP), \Delta\log(PM1LC/PGDP), USAPX1/USAPC1 ]$   
 (1.7)  $\log(M1USA) = f[ \log(GDP), \Delta\log(PM1LC/PGDP), \log(USAPX1/USAPC1) ]$

(ラグ項あり)

- (1.5)  $\log(M1CHN) = f[ \log(GDP), \Delta(PM1LC/PGDP), CHNPX1(-1)/CHNPC1(-1), \log(M1CHN(-1)) ]$   
 (1.5)  $\log(M1CHN) = f[ \log(GDP), \Delta(PM1LC/PGDP), \Delta(CHNPX1(-1)/CHNPC1(-1)), \log(M1CHN(-1)) ]$   
 (1.5)  $\log(M1CHN) = f[ \log(GDP), \Delta(PM1LC/PGDP), \Delta\log(CHNPX1(-1)/CHNPC1(-1)), \log(M1CHN(-1)) ]$   
 (1.5)  $\log(M1CHN) = f[ \log(GDP), \Delta\log(PM1LC/PGDP), \Delta(CHNPX1(-1)/CHNPC1(-1)), \log(M1CHN(-1)) ]$   
 (1.5)  $\log(M1CHN) = f[ \log(GDP), \Delta\log(PM1LC/PGDP), \Delta\log(CHNPX1(-1)/CHNPC1(-1)), \log(M1CHN(-1)) ]$   
 (1.5)  $M1JPN = f[ GDP, \Delta\log(PM1LC/PGDP), JPNPX1/JPNPC1, M1JPN(-1) ]$   
 (1.5)  $M1JPN = f[ GDP, \Delta\log(PM1LC/PGDP), \Delta(JPNPX1/JPNPC1), M1JPN(-1) ]$   
 (2.5)  $\log(M1TWN) = f[ \log(GDP), PM1LC/PGDP, \log(TWNPX1(-1)/TWNPC1(-1)), \log(M1TWN(-1)) ]$   
 (1.1)  $M1USA = f[ GDP, \Delta\log(PM1LC/PGDP), USAPX1/USAPC1, M1USA(-1) ]$   
 (1.1)  $M1USA = f[ GDP, \Delta\log(PM1LC/PGDP), \log(USAPX1/USAPC1), M1USA(-1) ]$   
 (1.1)  $\Delta(M1USA) = f[ \Delta(GDP), \Delta\log(PM1LC/PGDP), USAPX1/USAPC1, \Delta(M1USA(-1)) ]$   
 (1.1)  $\Delta(M1USA) = f[ \Delta(GDP), \Delta\log(PM1LC/PGDP), \log(USAPX1/USAPC1), \Delta(M1USA(-1)) ]$   
 (1.1)  $\Delta(M1USA) = f[ \Delta(GDP), \Delta\log(PM1LC/PGDP), \Delta(USAPX1/USAPC1), \Delta(M1USA(-1)) ]$   
 (1.1)  $\Delta(M1USA) = f[ \Delta(GDP), \Delta\log(PM1LC/PGDP), \Delta\log(USAPX1/USAPC1), \Delta(M1USA(-1)) ]$

### 【財3・絶対輸入価格】

(ラグ項なし)

- (1.6)  $M3CHN = f[ GDP, \log(PM3LC(-1)), CHNPX3/CHNPC3 ]$   
 (1.6)  $M3CHN = f[ GDP, \log(PM3LC(-1)), \log(CHNPX3/CHNPC3) ]$   
 (1.2)  $\log(M3JPN) = f[ \log(GDP), PM3LC, JPNPX3/JPNPC3 ]$   
 (1.2)  $\log(M3JPN) = f[ \log(GDP), \Delta(PM3LC), JPNPX3/JPNPC3 ]$   
 (1.7)  $\log(M3TWN) = f[ \log(GDP), \Delta\log(PM3LC), TWNPX3/TWNPC3 ]$   
 (3.0)  $\Delta\log(M3USA) = f[ \Delta\log(GDP), \Delta(PM3LC), \log(USAPX3(-1)/USAPC3(-1)) ]$

(ラグ項あり)

- (1.9)  $M3CHN = f[ GDP, PM3LC(-1), CHNPX3(-1)/CHNPC3(-1), M3CHN(-1) ]$   
 (1.9)  $M3CHN = f[ GDP, PM3LC(-1), \log(CHNPX3(-1)/CHNPC3(-1)), M3CHN(-1) ]$   
 (1.9)  $M3CHN = f[ GDP, \log(PM3LC(-1)), CHNPX3(-1)/CHNPC3(-1), M3CHN(-1) ]$   
 (1.9)  $M3CHN = f[ GDP, \log(PM3LC(-1)), \log(CHNPX3(-1)/CHNPC3(-1)), M3CHN(-1) ]$   
 (0.6)  $\log(M3JPN) = f[ \log(GDP), PM3LC, \log(JPNPX3(-1)/JPNPC3(-1)), \log(M3JPN(-1)) ]$



- (1.0)  $M3TWN = f[ GDP, PM3LC, \log(TWNPX3(-1)/TWNPC3(-1)), M3TWN(-1) ]$   
 (1.0)  $M3TWN = f[ GDP, \Delta(PM3LC), \log(TWNPX3(-1)/TWNPC3(-1)), M3TWN(-1) ]$   
 (1.0)  $M3TWN = f[ GDP, \Delta\log(PM3LC), \log(TWNPX3(-1)/TWNPC3(-1)), M3TWN(-1) ]$   
 (1.0)  $\log(M3TWN) = f[ \log(GDP), \log(PM3LC), TWNPX3(-1)/TWNPC3(-1), \log(M3TWN(-1)) ]$   
 (0.9)  $M3USA = f[ GDP, \log(PM3LC), \Delta\log(USAPX3/USAPC3), M3USA(-1) ]$

【財 3・相対輸入価格】

(ラグ項なし)

- (1.5)  $M3CHN = f[ GDP, PM3LC(-1)/PGDP(-1), CHNPX3(-1)/CHNPC3(-1) ]$   
 (1.5)  $M3CHN = f[ GDP, PM3LC(-1)/PGDP(-1), \log(CHNPX3(-1)/CHNPC3(-1)) ]$   
 (1.5)  $M3CHN = f[ GDP, \log(PM3LC(-1)/PGDP(-1)), CHNPX3(-1)/CHNPC3(-1) ]$   
 (1.5)  $M3CHN = f[ GDP, \log(PM3LC(-1)/PGDP(-1)), \log(CHNPX3(-1)/CHNPC3(-1)) ]$   
 (1.1)  $\log(M3JPN) = f[ \log(GDP), PM3LC(-1)/PGDP(-1), \Delta(JPNPX3/JPNPC3) ]$   
 (1.6)  $M3TWN = f[ GDP, \Delta\log(PM3LC/PGDP), \log(TWNPX3/TWNPC3) ]$   
 (1.6)  $\log(M3TWN) = f[ \log(GDP), \Delta\log(PM3LC(-1)/PGDP(-1)), TWNPX3/TWNPC3 ]$   
 (2.8)  $\Delta\log(M3USA) = f[ \Delta\log(GDP), \Delta\log(PM3LC/PGDP), \log(USAPX3(-1)/USAPC3(-1)) ]$

(ラグ項あり)

- (1.3)  $M3CHN = f[ GDP, PM3LC/PGDP, CHNPX3(-1)/CHNPC3(-1), M3CHN(-1) ]$   
 (1.3)  $M3CHN = f[ GDP, PM3LC/PGDP, \log(CHNPX3(-1)/CHNPC3(-1)), M3CHN(-1) ]$   
 (1.3)  $M3CHN = f[ GDP, \log(PM3LC/PGDP), CHNPX3(-1)/CHNPC3(-1), M3CHN(-1) ]$   
 (1.3)  $M3CHN = f[ GDP, \log(PM3LC/PGDP), \log(CHNPX3(-1)/CHNPC3(-1)), M3CHN(-1) ]$   
 (0.3)  $\log(M3JPN) = f[ \log(GDP), PM3LC(-1)/PGDP(-1), \Delta\log(JPNPX3(-1)/JPNPC3(-1)), \log(M3JPN(-1)) ]$   
 (0.3)  $\log(M3JPN) = f[ \log(GDP), \Delta\log(PM3LC/PGDP), \log(JPNPX3(-1)/JPNPC3(-1)), \log(M3JPN(-1)) ]$   
 (1.4)  $\log(M3TWN) = f[ \log(GDP), \Delta(PM3LC(-1)/PGDP(-1)), \log(TWNPX3(-1)/TWNPC3(-1)), \log(M3TWN(-1)) ]$   
 (1.2)  $M3USA = f[ GDP, \log(PM3LC/PGDP), USAPX3/USAPC3, M3USA(-1) ]$   
 (1.2)  $M3USA = f[ GDP, \log(PM3LC/PGDP), \log(USAPX3/USAPC3), M3USA(-1) ]$

(附表 5 - 4) 輸入関数 (候補) 「台湾」

【財 1・絶対輸入価格】

(ラグ項なし)

- (0.9)  $\Delta(M1CHN) = f[ \Delta(GDP), \Delta\log(PM1LC(-1)), CHNPX1/CHNPC1 ]$   
 (0.9)  $\Delta(M1CHN) = f[ \Delta(GDP), \Delta\log(PM1LC(-1)), \log(CHNPX1/CHNPC1) ]$   
 (0.9)  $\Delta\log(M1CHN) = f[ \Delta\log(GDP), \Delta(PM1LC(-1)), CHNPX1/CHNPC1 ]$   
 (0.9)  $\Delta\log(M1CHN) = f[ \Delta\log(GDP), \Delta(PM1LC(-1)), \log(CHNPX1/CHNPC1) ]$   
 (0.9)  $\Delta\log(M1CHN) = f[ \Delta\log(GDP), \Delta\log(PM1LC(-1)), CHNPX1/CHNPC1 ]$   
 (0.9)  $\Delta\log(M1CHN) = f[ \Delta\log(GDP), \Delta\log(PM1LC(-1)), \log(CHNPX1/CHNPC1) ]$   
 (1.5)  $\Delta(M1JPN) = f[ \Delta(GDP), \Delta\log(PM1LC(-1)), JPNPX1/JPNPC1 ]$   
 (1.5)  $\Delta(M1JPN) = f[ \Delta(GDP), \Delta\log(PM1LC(-1)), \log(JPNPX1/JPNPC1) ]$

- (0.9)  $\Delta(M1KOR) = f[ \Delta(GDP), \log(PM1LC), KORPX1/KORPC1 ]$   
 (0.9)  $\Delta(M1KOR) = f[ \Delta(GDP), \log(PM1LC), \log(KORPX1/KORPC1) ]$   
 (0.4)  $\Delta\log(M1USA) = f[ \Delta\log(GDP), \Delta\log(PM1LC), \Delta(USAPX1/USAPC1) ]$   
 (0.4)  $\Delta\log(M1USA) = f[ \Delta\log(GDP), \Delta\log(PM1LC), \Delta\log(USAPX1/USAPC1) ]$

(ラグ項あり)

- (0.7)  $M1CHN = f[ GDP, PM1LC(-1), CHNPX1/CHNPC1, M1CHN(-1) ]$   
 (0.7)  $M1CHN = f[ GDP, PM1LC(-1), \log(CHNPX1/CHNPC1), M1CHN(-1) ]$   
 (0.7)  $M1CHN = f[ GDP, \log(PM1LC(-1)), CHNPX1/CHNPC1, M1CHN(-1) ]$   
 (0.7)  $M1CHN = f[ GDP, \log(PM1LC(-1)), \log(CHNPX1/CHNPC1), M1CHN(-1) ]$   
 (1.9)  $M1JPN = f[ GDP, PM1LC, JPNPX1/JPNPC1, M1JPN(-1) ]$   
 (1.9)  $M1JPN = f[ GDP, PM1LC, \log(JPNPX1/JPNPC1), M1JPN(-1) ]$   
 (1.3)  $\Delta(M1KOR) = f[ \Delta(GDP), \Delta(PM1LC), \Delta(KORPX1/KORPC1), \Delta(M1KOR(-1)) ]$   
 (1.3)  $\Delta(M1KOR) = f[ \Delta(GDP), \Delta(PM1LC), \Delta\log(KORPX1/KORPC1), \Delta(M1KOR(-1)) ]$

【財 1・相対輸入価格】

(ラグ項なし)

- (0.9)  $\Delta(M1CHN) = f[\Delta(GDP), \Delta \log(PM1LC(-1)/PGDP(-1)), CHNPX1/CHNPC1]$
- (0.9)  $\Delta(M1CHN) = f[\Delta(GDP), \Delta \log(PM1LC(-1)/PGDP(-1)), \log(CHNPX1/CHNPC1)]$
- (0.9)  $\Delta \log(M1CHN) = f[\Delta \log(GDP), \Delta(PM1LC(-1)/PGDP(-1)), CHNPX1/CHNPC1]$
- (0.9)  $\Delta \log(M1CHN) = f[\Delta \log(GDP), \Delta(PM1LC(-1)/PGDP(-1)), \log(CHNPX1/CHNPC1)]$
- (0.9)  $\Delta \log(M1CHN) = f[\Delta \log(GDP), \Delta \log(PM1LC(-1)/PGDP(-1)), \log(CHNPX1/CHNPC1)]$
- (1.5)  $\Delta(M1JPN) = f[\Delta(GDP), \Delta(PM1LC(-1)/PGDP(-1)), JPNPX1/JPNPC1]$
- (1.5)  $\Delta(M1JPN) = f[\Delta(GDP), \Delta(PM1LC(-1)/PGDP(-1)), \log(JPNPX1/JPNPC1)]$
- (0.9)  $\Delta(M1KOR) = f[\Delta(GDP), PM1LC/PGDP, KORPX1/KORPC1]$
- (0.9)  $\Delta(M1KOR) = f[\Delta(GDP), PM1LC/PGDP, \log(KORPX1/KORPC1)]$
- (0.9)  $\Delta(M1KOR) = f[\Delta(GDP), \log(PM1LC/PGDP), KORPX1/KORPC1]$
- (0.9)  $\Delta(M1KOR) = f[\Delta(GDP), \log(PM1LC/PGDP), \log(KORPX1/KORPC1)]$
- (0.9)  $\Delta \log(M1KOR) = f[\Delta \log(GDP), PM1LC/PGDP, KORPX1/KORPC1]$
- (0.9)  $\Delta \log(M1KOR) = f[\Delta \log(GDP), PM1LC/PGDP, \log(KORPX1/KORPC1)]$
- (0.9)  $\Delta \log(M1KOR) = f[\Delta \log(GDP), \log(PM1LC/PGDP), \log(KORPX1/KORPC1)]$
- (0.4)  $\Delta \log(M1USA) = f[\Delta \log(GDP), \Delta \log(PM1LC/PGDP), \Delta \log(USAPX1/USAPC1)]$

(ラグ項あり)

- (0.8)  $M1CHN = f[GDP, \log(PM1LC(-1)/PGDP(-1)), CHNPX1/CHNPC1, M1CHN(-1)]$
- (0.8)  $M1CHN = f[GDP, \log(PM1LC(-1)/PGDP(-1)), \log(CHNPX1/CHNPC1), M1CHN(-1)]$
- (1.8)  $M1JPN = f[GDP, PM1LC/PGDP, JPNPX1/JPNPC1, M1JPN(-1)]$
- (1.2)  $\Delta(M1KOR) = f[\Delta(GDP), \Delta(PM1LC/PGDP), \Delta(KORPX1/KORPC1), \Delta(M1KOR(-1))]$
- (1.2)  $\Delta(M1KOR) = f[\Delta(GDP), \Delta(PM1LC/PGDP), \Delta \log(KORPX1/KORPC1), \Delta(M1KOR(-1))]$

【財 3・絶対輸入価格】

(ラグ項なし)

- (0.9)  $\log(M3CHN) = f[\log(GDP), \Delta \log(PM3LC), \Delta(CHNPX3/CHNPC3)]$
- (0.9)  $\log(M3CHN) = f[\log(GDP), \Delta \log(PM3LC), \Delta \log(CHNPX3/CHNPC3)]$
- (1.5)  $\log(M3JPN) = f[\log(GDP), \Delta(PM3LC(-1)), \Delta(JPNPX3/JPNPC3)]$
- (1.5)  $\log(M3JPN) = f[\log(GDP), \Delta(PM3LC(-1)), \Delta \log(JPNPX3/JPNPC3)]$
- (2.0)  $\log(M3KOR) = f[\log(GDP), \log(PM3LC(-1)), \log(KORPX3(-1)/KORPC3(-1))]$
- (1.5)  $\log(M3USA) = f[\log(GDP), PM3LC(-1), USAPX3(-1)/USAPC3(-1)]$

(ラグ項あり)

- (0.6)  $\log(M3CHN) = f[\log(GDP), \Delta(PM3LC(-1)), \Delta(CHNPX3/CHNPC3), \log(M3CHN(-1))]$
- (0.6)  $\log(M3CHN) = f[\log(GDP), \Delta(PM3LC(-1)), \Delta \log(CHNPX3/CHNPC3), \log(M3CHN(-1))]$
- (0.6)  $\log(M3CHN) = f[\log(GDP), \Delta \log(PM3LC(-1)), \Delta(CHNPX3/CHNPC3), \log(M3CHN(-1))]$
- (0.6)  $\log(M3CHN) = f[\log(GDP), \Delta \log(PM3LC(-1)), \Delta \log(CHNPX3/CHNPC3), \log(M3CHN(-1))]$
- (0.6)  $\Delta(M3CHN) = f[\Delta(GDP), \Delta(PM3LC(-1)), \Delta \log(CHNPX3/CHNPC3), \Delta(M3CHN(-1))]$
- (1.8)  $M3KOR = f[GDP, \log(PM3LC(-1)), \log(KORPX3(-1)/KORPC3(-1)), M3KOR(-1)]$
- (0.6)  $M3USA = f[GDP, \log(PM3LC), \log(USAPX3(-1)/USAPC3(-1)), M3USA(-1)]$

【財 3・相対輸入価格】

(ラグ項なし)

- (1.0)  $\log(M3CHN) = f[ \log(GDP), \Delta\log(PM3LC/PGDP), \Delta(CHNPX3/CHNPC3) ]$
- (1.0)  $\log(M3CHN) = f[ \log(GDP), \Delta\log(PM3LC/PGDP), \Delta\log(CHNPX3/CHNPC3) ]$
- (1.4)  $M3JPN = f[ GDP, \Delta(PM3LC(-1)/PGDP(-1)), \Delta\log(JPNPX3/JPNPC3) ]$
- (1.4)  $\log(M3JPN) = f[ \log(GDP), \Delta(PM3LC(-1)/PGDP(-1)), \Delta(JPNPX3/JPNPC3) ]$
- (1.4)  $\log(M3JPN) = f[ \log(GDP), \Delta(PM3LC(-1)/PGDP(-1)), \Delta\log(JPNPX3/JPNPC3) ]$
- (1.8)  $\log(M3KOR) = f[ \log(GDP), PM3LC(-1)/PGDP(-1), \log(KORPX3(-1)/KORPC3(-1)) ]$
- (1.8)  $\log(M3KOR) = f[ \log(GDP), \log(PM3LC(-1)/PGDP(-1)), \log(KORPX3(-1)/KORPC3(-1)) ]$
- (1.6)  $\log(M3USA) = f[ \log(GDP), PM3LC(-1)/PGDP(-1), USAPX3(-1)/USAPC3(-1) ]$
- (1.6)  $\log(M3USA) = f[ \log(GDP), \log(PM3LC(-1)/PGDP(-1)), USAPX3(-1)/USAPC3(-1) ]$

(ラグ項あり)

- (0.7)  $\log(M3CHN) = f[ \log(GDP), \Delta(PM3LC(-1)/PGDP(-1)), \Delta\log(CHNPX3/CHNPC3), \log(M3CHN(-1)) ]$
- (0.7)  $\log(M3CHN) = f[ \log(GDP), \Delta\log(PM3LC(-1)/PGDP(-1)), \Delta(CHNPX3/CHNPC3), \log(M3CHN(-1)) ]$
- (0.7)  $\log(M3CHN) = f[ \log(GDP), \Delta\log(PM3LC(-1)/PGDP(-1)), \Delta\log(CHNPX3/CHNPC3), \log(M3CHN(-1)) ]$
- (1.8)  $\log(M3KOR) = f[ \log(GDP), \log(PM3LC/PGDP), \log(KORPX3(-1)/KORPC3(-1)), \log(M3KOR(-1)) ]$
- (0.6)  $M3USA = f[ GDP, \log(PM3LC/PGDP), USAPX3(-1)/USAPC3(-1), M3USA(-1) ]$
- (0.6)  $M3USA = f[ GDP, \log(PM3LC/PGDP), \log(USAPX3(-1)/USAPC3(-1)), M3USA(-1) ]$

(附表 5 - 5) 輸入関数 (候補) 「米国」

【財 1・絶対輸入価格】

(ラグ項なし)

- (1.5)  $M1CHN = f[ GDP, \Delta(PM1LC), \log(CHNPX1(-1)/CHNPC1(-1)) ]$
- (1.5)  $M1CHN = f[ GDP, \Delta\log(PM1LC), \log(CHNPX1(-1)/CHNPC1(-1)) ]$
- (1.9)  $\Delta\log(M1JPN) = f[ \Delta\log(GDP), \Delta\log(PM1LC), \Delta\log(JPNPX1(-1)/JPNPC1(-1)) ]$
- (0.4)  $\Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta(PM1LC), \Delta(KORPX1(-1)/KORPC1(-1)) ]$
- (0.4)  $\Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta(PM1LC), \Delta\log(KORPX1(-1)/KORPC1(-1)) ]$
- (0.4)  $\Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta\log(PM1LC), \Delta(KORPX1(-1)/KORPC1(-1)) ]$
- (0.4)  $\Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta\log(PM1LC), \Delta\log(KORPX1(-1)/KORPC1(-1)) ]$
- (1.2)  $M1TWN = f[ GDP, PM1LC, \Delta\log(TWNPX1(-1)/TWNPC1(-1)) ]$

(ラグ項あり)

$$(0.7) M1CHN = f[ GDP, \Delta(PM1LC), CHNPX1/CHNPC1, M1CHN(-1) ]$$

$$(0.7) M1CHN = f[ GDP, \Delta(PM1LC), \log(CHNPX1/CHNPC1), M1CHN(-1) ]$$

$$(0.7) M1CHN = f[ GDP, \Delta(PM1LC), \Delta(CHNPX1/CHNPC1), M1CHN(-1) ]$$

$$(0.7) M1CHN = f[ GDP, \Delta\log(PM1LC), CHNPX1/CHNPC1, M1CHN(-1) ]$$

$$(0.7) M1CHN = f[ GDP, \Delta\log(PM1LC), \log(CHNPX1/CHNPC1), M1CHN(-1) ]$$

$$(1.5) \Delta(M1JPN) = f[ \Delta(GDP), \Delta(PM1LC), \Delta\log(JPNPX1(-1)/JPNPC1(-1)), \Delta(M1JPN(-1)) ]$$

$$(1.5) \Delta(M1JPN) = f[ \Delta(GDP), \Delta\log(PM1LC), \Delta\log(JPNPX1(-1)/JPNPC1(-1)), \Delta(M1JPN(-1)) ]$$

$$(0.85) \Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta(PM1LC), \Delta\log(KORPX1(-1)/KORPC1(-1)), \\ \Delta\log(M1KOR(-1)) ]$$

$$(0.84) \Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta(PM1LC), \log(KORPX1(-1)/KORPC1(-1)), \\ \Delta\log(M1KOR(-1)) ]$$

$$(0.83) \Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta(PM1LC), KORPX1(-1)/KORPC1(-1), \Delta\log(M1KOR(-1)) ]$$

$$(0.83) \Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta(PM1LC), \Delta(KORPX1(-1)/KORPC1(-1)), \Delta\log(M1KOR(-1)) ]$$

$$(0.7) M1TWN = f[ GDP, \Delta(PM1LC), \Delta(TWNPX1(-1)/TWNPC1(-1)), M1TWN(-1) ]$$

$$(0.7) M1TWN = f[ GDP, \Delta\log(PM1LC), \Delta(TWNPX1(-1)/TWNPC1(-1)), M1TWN(-1) ]$$

#### 【財 1・相対輸入価格】

(ラグ項なし)

$$(1.6) M1CHN = f[ GDP, \Delta(PM1LC/PGDP), \log(CHNPX1(-1)/CHNPC1(-1)) ]$$

$$(1.6) M1CHN = f[ GDP, \Delta\log(PM1LC/PGDP), CHNPX1(-1)/CHNPC1(-1) ]$$

$$(1.6) M1CHN = f[ GDP, \Delta\log(PM1LC/PGDP), \log(CHNPX1(-1)/CHNPC1(-1)) ]$$

$$(1.8) \Delta\log(M1JPN) = f[ \Delta\log(GDP), \Delta\log(PM1LC/PGDP), \Delta\log(JPNPX1(-1)/JPNPC1(-1)) ]$$

$$(0.6) \Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta(PM1LC/PGDP), KORPX1/KORPC1 ]$$

$$(0.6) \Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta(PM1LC/PGDP), \Delta(KORPX1(-1)/KORPC1(-1)) ]$$

$$(0.6) \Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta(PM1LC/PGDP), \Delta\log(KORPX1(-1)/KORPC1(-1)) ]$$

$$(1.3) \log(M1TWN) = f[ \log(GDP), \Delta(PM1LC/PGDP), \Delta\log(TWNPX1/TWNPC1) ]$$

(ラグ項あり)

$$(0.85) M1CHN = f[ GDP, \Delta\log(PM1LC/PGDP), \Delta(CHNPX1/CHNPC1), M1CHN(-1) ]$$

$$(0.85) M1CHN = f[ GDP, \Delta\log(PM1LC/PGDP), \Delta\log(CHNPX1/CHNPC1), M1CHN(-1) ]$$

$$(0.85) \log(M1CHN) = f[ \log(GDP), \Delta(PM1LC/PGDP), \log(CHNPX1(-1)/CHNPC1(-1)), \\ \log(M1CHN(-1)) ]$$

$$(1.5) \Delta(M1JPN) = f[ \Delta(GDP), \Delta\log(PM1LC/PGDP), \Delta\log(JPNPX1(-1)/JPNPC1(-1)), \\ \Delta(M1JPN(-1)) ]$$

$$(1.1) \Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta(PM1LC/PGDP), \Delta(KORPX1(-1)/KORPC1(-1)), \\ \Delta\log(M1KOR(-1)) ]$$

$$(1.1) \Delta\log(M1KOR) = f[ \Delta\log(GDP), \Delta(PM1LC/PGDP), \Delta\log(KORPX1(-1)/KORPC1(-1)), \\ \Delta\log(M1KOR(-1)) ]$$

$$(0.7) M1TWN = f[ GDP, \Delta\log(PM1LC/PGDP), \Delta(TWNPX1(-1)/TWNPC1(-1)), M1TWN(-1) ]$$

$$(0.7) \log(M1TWN) = f[ \log(GDP), \Delta(PM1LC/PGDP), \Delta(TWNPX1(-1)/TWNPC1(-1)), \\ \log(M1TWN(-1)) ]$$

$$(0.7) \log(M1TWN) = f[ \log(GDP), \Delta\log(PM1LC/PGDP), \Delta(TWNPX1(-1)/TWNPC1(-1)), \\ \log(M1TWN(-1)) ]$$

$\log(M1TWN(-1)) ]$

【財 3・絶対輸入価格】

(ラグ項なし)

- (1.98)  $\Delta\log(M3CHN) = f[ \Delta\log(GDP), PM3LC, CHNPX3(-1)/CHNPC3(-1) ]$   
(1.97)  $\Delta\log(M3CHN) = f[ \Delta\log(GDP), \log(PM3LC), CHNPX3(-1)/CHNPC3(-1) ]$   
(1.96)  $\Delta\log(M3CHN) = f[ \Delta\log(GDP), PM3LC, \log(CHNPX3(-1)/CHNPC3(-1)) ]$   
(1.94)  $\Delta\log(M3CHN) = f[ \Delta\log(GDP), \log(PM3LC), \log(CHNPX3(-1)/CHNPC3(-1)) ]$   
(1.92)  $M3CHN = f[ GDP, \Delta\log(PM3LC), \log(CHNPX3/CHNPC3) ]$   
(0.75)  $M3JPN = f[ GDP, PM3LC(-1), \Delta\log(PX3JPN/PC3JPN) ]$   
(0.75)  $\Delta\log(M3JPN) = f[ \Delta\log(GDP), PM3LC, \Delta(PX3JPN(-1)/PC3JPN(-1)) ]$   
(0.75)  $\Delta\log(M3JPN) = f[ \Delta\log(GDP), PM3LC, \Delta\log(PX3JPN(-1)/PC3JPN(-1)) ]$   
(0.5)  $\Delta\log(M3KOR) = f[ \Delta\log(GDP), \Delta(PM3LC), \Delta(KORPX3(-1)/KORPC3(-1)) ]$   
(0.5)  $\Delta\log(M3KOR) = f[ \Delta\log(GDP), \Delta(PM3LC), \Delta\log(KORPX3(-1)/KORPC3(-1)) ]$   
(0.5)  $\Delta\log(M3KOR) = f[ \Delta\log(GDP), \Delta\log(PM3LC), \Delta(KORPX3(-1)/KORPC3(-1)) ]$   
(0.5)  $\Delta\log(M3KOR) = f[ \Delta\log(GDP), \Delta\log(PM3LC), \Delta\log(KORPX3(-1)/KORPC3(-1)) ]$   
(3.7)  $\Delta\log(M3TWN) = f[ \Delta\log(GDP), \Delta\log(PM3LC), \log(TWNPX3/TWNPC3) ]$

(ラグ項あり)

- (2.7)  $\log(M3CHN) = f[ \log(GDP), PM3LC, CHNPX3(-1)/CHNPC3(-1), \log(M3CHN(-1)) ]$   
(2.7)  $\log(M3CHN) = f[ \log(GDP), PM3LC, \log(CHNPX3(-1)/CHNPC3(-1)), \log(M3CHN(-1)) ]$   
(2.7)  $\log(M3CHN) = f[ \log(GDP), \log(PM3LC), CHNPX3(-1)/CHNPC3(-1), \log(M3CHN(-1)) ]$   
(2.7)  $\log(M3CHN) = f[ \log(GDP), \log(PM3LC), \log(CHNPX3(-1)/CHNPC3(-1)), \log(M3CHN(-1)) ]$   
(0.7)  $\Delta\log(M3JPN) = f[ \Delta\log(GDP), \Delta(PM3LC), \Delta(JPNPX3(-1)/JPNPC3(-1)), \Delta\log(M3JPN(-1)) ]$   
(0.67)  $\Delta\log(M3KOR) = f[ \Delta\log(GDP), \Delta(PM3LC), \Delta\log(PX3KOR(-1)/PC3KOR(-1)),$   
 $\Delta\log(M3KOR(-1)) ]$   
(0.66)  $\Delta\log(M3KOR) = f[ \Delta\log(GDP), \Delta\log(PM3LC), \Delta\log(PX3KOR(-1)/PC3KOR(-1)),$   
 $\Delta\log(M3KOR(-1)) ]$   
(0.65)  $\Delta\log(M3KOR) = f[ \Delta\log(GDP), \Delta(PM3LC), \Delta(PX3KOR(-1)/PC3KOR(-1)), \Delta\log(M3KOR(-1)) ]$   
(0.64)  $\Delta\log(M3KOR) = f[ \Delta\log(GDP), \Delta\log(PM3LC), \Delta(PX3KOR(-1)/PC3KOR(-1)),$   
 $\Delta\log(M3KOR(-1)) ]$   
(2.5)  $M3TWN = f[ GDP, PM3LC, TWNPX3(-1)/TWNPC3(-1), M3TWN(-1) ]$   
(2.5)  $M3TWN = f[ GDP, \log(PM3LC), TWNPX3(-1)/TWNPC3(-1), M3TWN(-1) ]$   
(2.5)  $M3TWN = f[ GDP, \Delta(PM3LC), TWNPX3(-1)/TWNPC3(-1), M3TWN(-1) ]$   
(2.5)  $M3TWN = f[ GDP, \Delta\log(PM3LC), TWNPX3(-1)/TWNPC3(-1), M3TWN(-1) ]$

【財3・相対輸入価格】

(ラグ項なし)

- (1.9)  $M3CHN = f[ GDP, \Delta \log(PM3LC/PGDP), CHNPX3/CHNPC3 ]$
- (1.9)  $M3CHN = f[ GDP, \Delta \log(PM3LC/PGDP), \log(CHNPX3/CHNPC3) ]$
- (1.2)  $\log(M3JPN) = f[ \log(GDP), PM3LC(-1)/PGDP(-1), \Delta(JPNPX3/JPNPC3) ]$
- (1.2)  $\log(M3JPN) = f[ \log(GDP), PM3LC(-1)/PGDP(-1), \Delta \log(JPNPX3/JPNPC3) ]$
- (0.6)  $\Delta \log(M3KOR) = f[ \Delta \log(GDP), \Delta(PM3LC/PGDP), \Delta(KORPX3(-1)/KORPC3(-1)) ]$
- (0.6)  $\Delta \log(M3KOR) = f[ \Delta \log(GDP), \Delta(PM3LC/PGDP), \Delta \log(KORPX3(-1)/KORPC3(-1)) ]$
- (0.6)  $\Delta \log(M3KOR) = f[ \Delta \log(GDP), \Delta \log(PM3LC/PGDP), \Delta(KORPX3(-1)/KORPC3(-1)) ]$
- (0.6)  $\Delta \log(M3KOR) = f[ \Delta \log(GDP), \Delta \log(PM3LC/PGDP), \Delta \log(KORPX3(-1)/KORPC3(-1)) ]$
- (6.0)  $M3TWN = f[ GDP, \log(PM3LC/PGDP), TWPX3(-1)/TWNPC3(-1) ]$

(ラグ項あり)

- (2.6)  $\log(M3CHN) = f[ \log(GDP), PM3LC/PGDP, CHNPX3(-1)/CHNPC3(-1), \log(M3CHN(-1)) ]$
- (2.6)  $\log(M3CHN) = f[ \log(GDP), PM3LC/PGDP, \log(CHNPX3(-1)/CHNPC3(-1)), \log(M3CHN(-1)) ]$
- (0.5)  $\Delta \log(M3JPN) = f[ \Delta \log(GDP), \Delta \log(PM3LC/PGDP), \Delta(JPNPX3(-1)/JPNPC3(-1)), \Delta \log(M3JPN(-1)) ]$
- (0.5)  $\Delta \log(M3JPN) = f[ \Delta \log(GDP), \Delta \log(PM3LC/PGDP), \Delta \log(JPNPX3(-1)/JPNPC3(-1)), \Delta \log(M3JPN(-1)) ]$
- (0.7)  $\Delta \log(M3KOR) = f[ \Delta \log(GDP), \Delta \log(PM3LC/PGDP), \Delta(KORPX3(-1)/KORPC3(-1)), \Delta \log(M3KOR(-1)) ]$
- (0.7)  $\Delta \log(M3KOR) = f[ \Delta \log(GDP), \Delta \log(PM3LC/PGDP), \Delta \log(KORPX3(-1)/KORPC3(-1)), \Delta \log(M3KOR(-1)) ]$
- (3.9)  $M3TWN = f[ GDP, \log(PM3LC/PGDP), \log(TWPX3(-1)/TWNPC3(-1)), M3TWN(-1) ]$

(サマリー表)

(附表5-A1) 中国 (t 値の初期値=4.0)

相手国		符号条件満足					
		定式化数	うち 最大t値	その個数	定式化数	うち 最大t値	その個数
		第1財			第3財		
中国	00	---	---	---	---	---	---
	01	---	---	---	---	---	---
	10	---	---	---	---	---	---
	11	---	---	---	---	---	---
日本	00	64	1.7	1	24	1.0	2
	01	112	1.8	4	22	1.1	4
	10	46	1.2	1	10	0.6	2
	11	52	1.0	3	4	0.5	2
韓国	00	66	1.7	2	51	1.7	1
	01	90	1.5	1	33	0.3	5
	10	62	2.2	2	27	1.5	3
	11	61	1.6	1	24	1.5	1
台湾	00	66	3.0	3	74	1.5	2
	01	44	1.1	3	77	1.1	2
	10	16	0.7	2	15	0.6	2
	11	16	0.3	6	19	0.9	5
米国	00	79	2.0	2	45	1.0	4
	01	122	2.4	4	67	1.2	2
	10	58	1.1	4	13	0.3	1
	11	36	0.5	2	22	0.6	1



(サマリー表)

(附表5-A2) 日本 (t 値の初期値=4.0)

相手国		符号条件満足					
		定式化数	うち 最大t値	その個数	定式化数	うち 最大t値	その個数
		第1財			第3財		
中国	00	34	0.5	4	56	1.8	5
	01	39	0.8	2	74	2.0	2
	10	11	0.3	4	83	2.5	2
	11	22	0.7	2	90	1.9	4
日本	00	---	---	---	---	---	---
	01	---	---	---	---	---	---
	10	---	---	---	---	---	---
	11	---	---	---	---	---	---
韓国	00	29	2.4	1	59	1.4	4
	01	35	2.1	1	64	1.4	3
	10	51	1.7	2	66	1.4	1
	11	38	1.8	1	93	1.2	1
台湾	00	54	1.7	1	15	3.2	1
	01	58	2.1	1	33	3.7	1
	10	55	1.1	1	17	1.5	1
	11	48	1.3	1	36	1.8	1
米国	00	40	1.0	2	89	1.6	1
	01	62	1.9	1	77	1.2	4
	10	58	1.0	2	110	1.4	2
	11	44	0.9	2	101	1.2	2

(サマリー表)

(附表5-A3) 韓国 (t 値の初期値=4.0)

相手国		符号条件満足					
		定式化数	うち 最大t値	その個数	定式化数	うち 最大t値	その個数
		第1財			第3財		
中国	00	154	2.0	5	106	1.5	4
	01	171	2.4	1	83	1.6	2
	10	104	1.5	5	110	1.3	4
	11	94	1.7	1	90	1.9	4
日本	00	92	1.7	1	54	1.1	1
	01	55	1.8	3	86	1.2	2
	10	20	1.5	2	10	0.3	2
	11	43	1.6	3	20	0.6	1
韓国	00	---	---	---	---	---	---
	01	---	---	---	---	---	---
	10	---	---	---	---	---	---
	11	---	---	---	---	---	---
台湾	00	29	2.0	1	42	1.6	2
	01	26	1.1	1	63	1.7	1
	10	25	2.5	1	27	1.4	1
	11	29	1.9	1	29	1.0	4
米国	00	76	1.7	2	40	2.8	1
	01	91	2.5	1	38	3.0	1
	10	69	1.1	6	62	1.2	2
	11	86	1.3	2	47	0.9	1

(サマリー表)

(附表5-A4) 台湾 (t 値の初期値=4.0)

相手国		符号条件満足					
		定式化数	うち 最大t値	その個数	定式化数	うち 最大t値	その個数
		第1財			第3財		
中国	00	96	0.9	5	15	1.0	2
	01	96	0.9	6	16	0.9	2
	10	76	0.8	2	28	0.7	3
	11	80	0.7	4	36	0.6	5
日本	00	62	1.5	2	44	1.4	3
	01	62	1.5	2	38	1.5	2
	10	125	1.8	1	×	×	×
	11	114	1.9	2	×	×	×
韓国	00	97	0.9	7	122	1.8	2
	01	94	0.9	2	129	2.0	1
	10	123	1.2	2	64	1.8	1
	11	122	1.3	2	67	1.8	1
台湾	00	---	---	---	---	---	---
	01	---	---	---	---	---	---
	10	---	---	---	---	---	---
	11	---	---	---	---	---	---
米国	00	12	0.4	1	89	1.6	2
	01	5	0.4	2	97	1.5	1
	10	×	×	×	14	0.6	2
	11	×	×	×	13	0.6	1

(サマリー表)

(附表5-A5) 米国 (t 値の初期値=6.0)

相手国		符号条件満足					
		定式化数	うち 最大t値	その個数	定式化数	うち 最大t値	その個数
		第1財			第3財		
中国	00	52	1.6	3	74	1.9	2
	01	40	1.5	2	68	1.9	6
	10	33	0.8	10	78	2.6	2
	11	27	0.7	5	85	2.7	4
日本	00	74	1.8	1	18	1.2	2
	01	60	1.9	1	20	0.7	6
	10	44	1.5	1	4	0.5	2
	11	35	1.5	2	8	0.7	1
韓国	00	36	0.6	3	28	0.6	4
	01	16	0.4	4	12	0.5	4
	10	22	1.1	2	38	0.7	2
	11	21	0.8	6	24	0.6	7
台湾	00	32	1.3	1	131	6.0	1
	01	42	1.2	1	139	3.7	1
	10	15	0.7	3	62	3.9	1
	11	18	0.7	2	55	2.5	4
米国	00	---	---	---	---	---	---
	01	---	---	---	---	---	---
	10	---	---	---	---	---	---
	11	---	---	---	---	---	---