บรรณานุกรม

หมวดภาษาไทย

หนังสือ

มนูญ พาหิระ . ทฤษฎีราคา. พิมพ์ครั้งที่ ๒. คณะเศรษฐศาสตร์ มหาวิทยาลัย-ธรรมศาสตร์. กรุงเทพมหานคร: โรงพิมพ์มหาวิทยาลัยธรรมศาสตร์, ๒๕๑๕.

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ภาคผนวก

ตารางที่ ก ๑. :ดัชนีราคาหมวดอาหารในแต่ละประเทศ

ปี	ญี่ปุ่น	สหรัฐ	ฮ่องกง	อิตาลี	มาเลเซีย
๒๕๑๐	๘๑.๓	๘๗.๐	๘๒.๘	๙๓.๐	๑๐๑.๐
๒๕๑๑	๘๖.๕	๙๐.๒	๘๕.๕	๙๓.๒	๙๙.๐
๒๕๑๒	๙๑.๗	๙๔.๘	๙๐.๓	๙๕.๙	๙๘.๐
๒๕๑๓	๑๐๐	๑๐๐	๑๐๐	๑๐๐	๑๐๐
๒๕๑๔	๑๐๕.๙	๑๐๓.๐	๑๐๓.๔	๑๐๔.๐	๑๐๒.๐
๒๕๑๕	๑๑๐.๑	๑๐๗.๕	๑๑๑.๐	๑๑๐.๖	๑๐๕.๑
๒๕๑๖	๑๒๔.๔	๑๒๓.๑	๑๓๗.๙	๑๒๓.๙	๑๒๑.๒
๒๕๑๗	๑๕๘.๙	๑๔๐.๗	๑๖๐.๐	๑๔๕.๙	๑๕๓.๕
๒๕๑๘	๑๗๙.๕	๑๕๒.๗	๑๐๔.๐	๑๗๒.๒	๑๕๘.๖
๒๕๑๙	๑๙๕.๙	๑๕๗.๔	๑๐๗.๐	๒๐๑.๖	๑๖๒.๐
๒๕๒๐	๒๐๙.๐	๑๖๗.๓	๑๑๔.๐	๒๔๐.๕	๑๗๐.๘
๒๕๒๑	๒๑๖.๔	๑๗๙.๕	๑๒๒.๐	๒๗๑.๖	๑๗๙.๓

ที่มา : กรมเศรษฐกิจการพาณิชย์

ตารางที่ ก ๒. อัตราแลกเปลี่ยนเงินตราระหว่างประเทศ

ปี	อัตราแลกเปลี่ยนเงินตรา (บาท)				
	ญี่ปุ่น	สหรัฐ	ฮ่องกง	อิตาลี	มาเลเซีย
๒๕๑๐	๐.๐๕๘	๒๐.๗๕	๓.๕๘	๐.๐๓๓๕	๖.๗๕
๒๕๑๑	๐.๐๕๘	๒๐.๘๒	๓.๔๑	๐.๐๓๓๓	๖.๘๒
๒๕๑๒	๐.๐๕๙	๒๐.๙๓	๓.๔๔	๐.๐๓๓๕	๖.๘๒
๒๕๑๓	๐.๐๕๙	๒๑.๐๐	๓.๖๔	๐.๐๓๓๖	๖.๘๔
๒๕๑๔	๐.๐๖๐๗	๒๑.๐๐	๓.๕๓	๐.๐๓๘๑	๖.๙๘
๒๕๑๕	๐.๐๖๙๖	๒๑.๐๐	๓.๗๔	๐.๐๓๕๕	๗.๕๐
๒๕๑๖	๐.๐๗๗๒	๒๐.๗๒	๔.๐๒	๐.๐๓๕๑	๘.๕๑
๒๕๑๗	๐.๐๗๑๐	๒๐.๔๕	๔.๐๘	๐.๐๓๐๙	๘.๕๔
๒๕๑๘	๐.๐๖๙๖	๒๐.๔๕	๔.๑๗	๐.๐๓๐๙	๘.๕๘
๒๕๑๙	๐.๐๖๙๘	๒๐.๔๕	๔.๒๑	๐.๐๒๓๓	๘.๐๙
๒๕๒๐	๐.๐๗๗๙	๒๐.๔๕	๔.๔๑	๐.๐๒๓๔	๘.๓๘
๒๕๒๑	๐.๐๙๗๐	๒๐.๔๕	๔.๓๘	๐.๐๒๓๙	๘.๗๖

ที่มา : รายงานเศรษฐกิจรายเดือน ธนาคารแห่งประเทศไทย
ประจำเดือนธันวาคม ๒๕๒๒

ตารางที่ ก ๓.รายได้ประชาชาติต่อหัวในประเทศญี่ปุ่น,สหรัฐฯ,ฮ่องกง, อิตาลีและมาเลเซีย พร้อมทั้งคาดการณ์ในอนาคต

ปี	รายได้ประชาชาติต่อหัว				
	ญี่ปุ่น	สหรัฐ	ฮ่องกง	อิตาลี	มาเลเซีย
๒๕๐๕	๑๘๒,๗๔๕	๒,๔๗๐	๑,๙๒๖	๔๓๗,๐๖๒	๕๘๔
๒๕๐๖	๒๐๗.๕๐๘	๒,๕๖๐	๒,๓๑๘	๔๙๗,๙๒๗	๖๐๓
๒๕๐๗	๒๓๔,๗๙๙	๒,๗๑๗	๒,๖๐๐	๕๓๙,๗๓๐	๖๒๑
๒๕๐๘	๒๕๙,๖๒๒	๒,๙๑๙	๒,๙๑๖	๕๗๕,๑๒๖	๖๕๘
๒๕๐๙	๒๙๕,๔๗๙	๓, .๗๔	๓,๐๐๒	๖๒๐,๒๖๒	๖๘๙
๒๕๑๐	๓๗๔,๘๔๙	๓,๖๖๙	๓,๓๓๑	๗๖๓,๐๓๔	๑,๐๒๑
๒๕๑๑	๔๓๙,๓๒๙	๓,๘๙๖	๓,๔๘๕	๘๑๙,๖๐๗	๑,๐๓๕
๒๕๑๒	๕๐๒,๓๖๕	๔,๑๔๐	๔,๐๑๕	๘๙๖,๘๔๙	๑,๐๘๒
๒๕๑๓	๖๐๘,๔๒๔	๔,๒๙๐	๔,๗๑๔	๙๙๒,๗๓๒	๑,๑๑๘
๒๕๑๔	๖๕๖,๓๑๐	๔,๕๗๙	๔,๑๔๓	๑,๐๖๘,๕๔๓	๑,๑๔๗
๒๕๑๕	๗๓๖,๙๔๔	๕,๐๒๘	๕,๘๖๓	๑,๑๖๔,๖๗๖	๑,๒๕๘
๒๕๑๖	๘๙๗,๐๒๐	๕,๕๖๕	๗,๓๐๐	๑,๓๗๒,๕๐๐	๑,๕๘๘
๒๕๑๗	๑,๐๔๑,๑๖๗	๕,๙๒๓	๘,๑๖๐	๑,๖๕๓,๗๙๙	๑,๘๗๗
๒๕๑๘	๑,๑๔๔,๕๗๓	๖,๒๙๓	๘,๔๗๐	๑,๘๒๖,๑๘๗	๑,๗๗๐
๒๕๑๙	๑,๒๗๐,๖๗๕	๖,๙๖๘	๑๐,๖๓๖	๒,๒๖๙,๖๑๐	๒,๑๙๘
๒๕๒๐	๑,๓๙๖,๐๖๕	๗,๖๘๔	๑๒,๑๕๘	๒,๗๑๓,๙๗๔	๒,๔๖๖
๒๕๒๑	๑,๕๗๐,๔๓๕	๘,๕๕๓	๑๓,๘๑๔	๓,๐๕๐,๙๓๕	๒,๖๗๐
๒๕๒๒	๑,๔๗๕,๑๙๒	๗,๙๖๓	๑๒,๐๑๕	๒,๕๗๑,๖๗๒	๒,๔๔๔
๒๕๒๓	๑,๕๖๑,๘๕๘	๘,๓๒๒	๑๒,๖๙๗	๒,๗๑๘,๔๔๗	๒,๕๗๐
๒๕๒๔	๑,๖๔๘,๕๒๕	๘,๖๘๑	๑๓,๓๘๐	๒,๘๖๕,๒๑๘	๒,๖๙๖
๒๕๒๕	๑,๗๓๕,๑๙๑	๙,๐๔๐	๑๔,๐๖๒	๓,๐๑๑,๙๘๙	๒,๘๒๒
๒๕๒๖	๑,๘๒๑,๘๕๗	๙,๓๙๙	๑๔,๗๔๕	๓,๑๕๘,๗๖๐	๒,๙๔๘
๒๕๒๗	๑,๙๐๘,๕๒๔	๙,๗๘๘	๑๕,๔๒๐	๓,๓๐๕,๕๓๑	๓,๐๗๔
๒๕๒๘	๑,๙๙๕,๑๙๐	๑๐,๑๑๗	๑๖,๑๐๑	๓,๔๕๒,๓๐๒	๓,๒๐๐
๒๕๒๙	๒,๐๘๑๗๘๕๖	๑๐,๔๗๖	๑๖,๗๘๓	๓,๕๙๙,๐๗๓	๓,๓๒๖
๒๕๓๐	๒,๑๖๘,๕๒๓	๑๐,๘๓๕	๑๗,๔๖๕	๓,๗๔๕,๘๔๔	๓,๔๕๒
๒๕๓๑	๒,๒๕๕,๑๘๐	๑๑,๑๙๔	๑๘,๑๔๗	๓,๘๙๒,๖๑๕	๓,๕๗๘

ที่มา United Nations, Mouthly Bulletin of Statistics,Decenber 1975,1979 No.12 และได้จากการคำนวณ.

ตารางที่ ก ๔. ประชากรในประเทศ ญี่ปุ่น, สหรัฐฯ , ฮ่องกง, อิตาลี และมาเลเซีย พร้อมทั้งคาดการณ์ในอนาคต

ปี	จำนวนประชากร (ล้านคน)				
	ญี่ปุ่น	สหรัฐฯ	ฮ่องกง	อิตาลี	มาเลเซีย
๒๕๐๕	๙๔.๙๗	๑๘๖.๖๖	๓.๓๕	๕๐.๒๔	๘.๖๕
๒๕๐๖	๙๕.๙๐	๑๘๙.๔๒	๓.๕๐	๔๐.๖๔	๘.๙๑
๒๕๐๗	๙๖.๙๐	๑๙๒.๑๒	๓.๕๙	๕๑.๑๒	๙.๑๕
๒๕๐๘	๙๗.๙๕	๑๙๔.๕๙	๓.๖๙	๕๑.๕๘	๙.๔๒
๒๕๐๙	๙๘.๘๖	๑๙๖.๙๑	๓.๗๐	๕๑.๙๗	๙.๔๓
๒๕๑๐	๑๐๐.๘๓	๑๙๘.๗๑	๓.๗๒	๕๒.๖๗	๙.๔๕
๒๕๑๑	๑๐๑.๙๖	๒๐๐.๗๑	๓.๘๐	๕๒.๙๙	๙.๗๓
๒๕๑๒	๑๐๓.๑๗	๒๐๒.๖๘	๓.๘๖	๕๓.๓๒	๑๐.๑๕
๒๕๑๓	๑๐๔.๓๔	๒๐๔.๘๘	๓.๙๖	๕๓.๖๖	๑๐.๓๙
๒๕๑๔	๑๐๕.๗๐	๒๐๗.๐๕	๔.๐๕	๕๔.๐๑	๑๐.๗๐
๒๕๑๕	๑๐๗.๑๙	๒๐๘.๘๕	๔.๑๒	๕๔.๔๑	๑๑.๐๐
๒๕๑๖	๑๐๘.๗๑	๒๑๐.๔๑	๔.๒๑	๕๔.๙๑	๑๑.๓๑
๒๕๑๗	๑๑๐.๑๖	๒๑๑.๙๐	๔.๓๒	๕๕.๔๑	๑๑.๖๕
๒๕๑๘	๑๑๑.๕๗	๒๑๓.๕๖	๔.๔๐	๕๕.๘๓	๑๑.๙๐
๒๕๑๙	๑๑๒.๗๗	๒๑๕.๑๔	๔.๔๔	๕๖.๑๗	๑๒.๓๐
๒๕๒๐	๑๑๓.๘๖	๒๑๖.๘๒	๔.๕๑	๕๖.๔๖	๑๒.๖๐
๒๕๒๑	๑๑๔.๙๐	๒๑๘.๖๔	๔.๖๑	๕๖.๗๐	๑๒.๙๖
๒๕๒๒	๑๑๖.๒๘	๒๒๑.๗๕	๔.๖๘	๕๗.๓๘	๑๒.๙๘
๒๕๒๓	๑๑๗.๕๒	๒๒๓.๗๔	๔.๗๕	๕๗.๗๙	๑๓.๒๒
๒๕๒๔	๑๑๘.๘๐	๒๒๕.๗๓	๔.๘๓	๕๘.๒๐	๑๓.๔๙
๒๕๒๕	๑๒๐.๑๐	๒๒๗.๗๒	๔.๙๑	๕๘.๖๒	๑๓.๗๕
๒๕๒๖	๑๒๑.๓๖	๒๒๙.๗๑	๔.๙๘	๕๙.๐๓	๑๔.๐๑
๒๕๒๗	๑๒๒.๖๔	๒๓๑.๗๐	๕.๐๖	๕๙.๔๔	๑๔.๒๘
๒๕๒๘	๑๒๓.๙๒	๒๓๓.๖๙	๕.๑๔	๕๙.๘๕	๑๔.๕๔
๒๕๒๙	๑๒๕.๒๐	๒๓๕.๖๘	๕.๒๒	๖๐.๒๗	๑๔.๘๑
๒๕๓๐	๑๒๖.๔๘	๒๓๗.๖๗	๕.๒๙	๖๐.๖๘	๑๕.๐๗
๒๕๓๑	๑๒๗.๗๖	๒๓๙.๖๖	๕.๓๗	๖๑.๐๙	๑๕.๓๓

ที่มา : Ibid และได้จากการคำนวณ

สมการอุปสงค์ที่มีต่อกุ้งทะเล, ปลาหมึก และปลาสดแช่แข็งส่งออกของประเทศไทย ในประเทศต่าง ๆ ที่ได้จากวิธี Ordinary Least Square (OLS.)

<u>รูปแบบจำลองที่ ๑.</u>

๑. <u>กุ้งทะเลแช่แข็ง</u>

๑.๑ <u>ประเทศญี่ปุ่น</u>

(1) $D_{11(t)} = 5017.96+0.342\ D_{11(t-1)} +0.995\ Y_{1(t)}$

t-test (2.07012) (0.755020), (0.05156)

R^2 = 14.69 % t(8,5 %) = 2.306

(2) $D_{11(t)} = -35526.3-0.1733\ D_{11(t-1)} -0.002\ Y_{1(t)} +418.45N_{1(t)}$

t-test (-2.33171) (-0.443601) (-0.823402) (2.68026)

R^2 = 57.90 % t(7,5 %) = 2.365

(3) $D_{11(t)} = -36057-0.173\ D_{11(t-1)} -0.002\ Y_{1(t)} +422.22\ N_{1(t)} +0.180\ \frac{P_{11(t)}}{F_{1(t)}}$

(4) $D_{11(t)} = 12490.3+0.114\ D_{11(t-1)} +0.00004\ Y_{1(t)} - \varepsilon,179\ \frac{P_{11(t)}}{F_{1(t)}}$

T-test (2.0714) (0.24499) (0.019462) (-1.34169)

R^2 = 32.14 % t (7,5 %) = 2.365

(5) $D_{11(t)} = -3094.2 - 0.3155\ D_{11(t-1)} + 375.847\ N_{1(t)}$

t-test (-2.22701) (-0.918896) (2.60453)

R^2 = 53.82 % t(8,5 %) = 2.306

(6) $D_{11(t)} = 12478.4 + 0.1198\ D_{11(t-1)} - 8.182\ \frac{P_{11(t)}}{F_{1(t)}}$

t-test (2.22385) (0.374325) (-1.43530)

R^2 = 32.14 % t(8,5 %) = 2.306

(7) $D_{11(t)} = -28123.7 - 0.3107\ D_{11(t-1)} + 356.340\ N_{1(t)} - 1.0325\ \frac{P_{11(t)}}{F_{1(t)}}$

t-test (-1.23314) (-0.84525) (1.82355) (-0.162144)

R^2 = 53.99 % t(7,5 %) = 2.365

(8) $D_{11(t)} = 6596.18 + 0.0012\ Y_{1(t)}$

t-test (5.5075) (0.92075)

R^2 = 8.61 % t(9,5 %) = 2.262

(9) $D_{11(t)} = -32830.7 - 0.002\ Y_{1(t)} + 384.368\ N_{1(t)}$

t-test (-2.47741) (-1.19822) (2.98166)

R^2 = 56.71 % T(8,5 %) = 2.306

(10) $D_{11(t)} = 13444.8+0.0004\ Y_{1(t)}-8.73\ \frac{P_{11(t)}}{F_{1(t)}}$

t-test (3.10954) (0.267113) (-1.63778)

R^2 = 31.56 % t(8, 5 %) = 2.306

(11) $D_{11(t)} = -33650.1-0.0016\ Y_{1(t)}+390.25\ N_{1(t)}+0.275\ \frac{P_{11(t)}}{F_{1(t)}}$

T-test (-1.42411) (-1.0962) (2.01767) (0.0433218)

R^2 = 56.72 % t(7, 5 %) = 2.365

(12) $D_{11(t)} = -2236.6+275.81\ N_{1(t)}$

t-test (-2.19179) (2.93732)

R^2 = 48.94 % t(9, 5 %) = 2.262

(13) $D_{11(t)} = 14131.20 - 9.293\ \frac{P_{11(t)}}{F_{1(t)}}$

t-test (4.29134) (-2.00834)

R^2 = 30.95 % t(9, 5 %) = 2.262

(14) $D_{11(t)} = -46637.724+0.519\ N_{1(t)}- 1099.752\ \frac{P_{11(t)}}{F_{1(t)}}$

t-test (-0.3341) (7.239) (-1.319)

R^2 = 36.40 % t(8, 5 %) = 2.306

จากสมการข้างต้น จะเห็นได้ว่าสมการที่ (14) เป็นสมการที่เหมาะสมที่สุด โดยได้ผ่านการคัดเลือกตามหลักเกณฑ์ทางเศรษฐศาสตร์และเศรษฐมิติ ซึ่ง

นำไปใช้ในการวิเคราะห์ได้ กล่าวคือ อุปสงค์กุ้งทะเลส่งออกของไทยในประเทศญี่ปุ่นจะขึ้นอยู่กับจะขึ้นอยู่กับจำนวนประชากรในประเทศญี่ปุ่น ส่วนราคากุ้งต่อดัชนีราคาหมวดอาหารจะมีอิทธิพลรองลงมา

๑.๒ ประเทศสหรัฐอเมริกา

(1) $D_{12(t)} = 257.221+0.1882\ D_{12(t-1)}+0.1665\ Y_{2(t)}$

t-test (0.512235) (0.572032) (1.71585)

R^2 = 44.40 % t (8, 5 %) = 2.306

(2) $D_{12(t)} = 22452.50 - 0.0926\ D_{12(t-1)} +0.643\ Y_{2(t)} -116.69\ N_{2(t)}$.

t-test (1.07610) (-0.22057) (1.4039) (-1.06407)

R^2 = 52.14 % t(7,0.5 %) = 2.365

(3) $D_{12(t)} = 21880.30-0.159\ D_{12(t-1)}+0.665\ Y_{2(t)}-111.47\ N_{2(t)} -229.38\ \frac{P_{12(t)}}{F_{2(t)}}$

t-test (0.939217) (-0.342941) (1.3669) (-0.95629) (-0.49569)

R^2 = 54.02 % t(6, 0.5 %) = 2.447.

(4) $D_{12(t)} = 750.17+0.0953\ D_{12(t-1)}+0.218\ Y_{2(t)}+269.32\ \frac{P_{12(t)}}{F_{2(t)}}$

t-test (0.75877) (0.25206) (1.6271) (-0.58799)

R^2 = 47.01 % t(7, 0.5 %) = 2.365

(5) $D_{12(t)} = -6093.49+0.324\ D_{12(t-1)}+ 33.829\ N_{2(t)}$

t-test (-1.22945) (1.02916) (1.38597)

R^2 = 38.66 % t(8,0.5 %) = 2.306

(6) $D_{12(t)} = 223.841+0.501\ D_{12(t-1)} + 219.22\ \frac{P_{12(t)}}{F_{2(t)}}$

t-test (0.21818) (1.6045) (0.577136)

R^2 = 26.97 % t(8, 0.5 %) = 2.306

(7) $D_{12(t)} = -7264.32+0.29\ D_{12(t-1)} + 41.63\ N_{2(t)} - 169.81\ \frac{P_{12(t)}}{F_{2(t)}}$

t-test (-1.16413) (0.812309) (1.21561) (-0.34766)

R^2 = 39.70 % t(7, 0.5 %) = 2.365

(8) $D_{12(t)} = 352.081+0.198\ Y_{2(t)}$

t-test (0.772239) (2.55933)

R^2 = 42.12 % t(9,0.5 %) = 2.262

(9) $D_{12(t)} = 19531.10 + 0.571\ Y_{2(t)} - 101.477\ N_{2(t)}$

t-test (1.29055) (1.8788) (-1.26782)

R^2 = 51.81 % t(8, 0.5 %) = 2.306

(10) $D_{12(t)} = 878.149 + 0.241\ Y_{2(t)} - 317.589\ \frac{P_{12(t)}}{F_{2(t)}}$

t-test (1.10165) (2.53823) (-0.812349)

R^2 = 46.53 % t(8,0.5 %) = 2.306

(11) $D_{12(t)} = 17392.60+0.5486\ Y_{2(t)} - 88.56\ N_{2(t)} - 183.44\ \frac{P_{12(t)}}{F_{2(t)}}$

t-test (1.0433) (1.68882) (-0.99176) (-0.443016)

R^2 = 53.12 % t(8,0.5 %) = 2.306

(12) $D_{12(t)} = -7821.27 + 44.29\ N_{2(t)}$

t-test (-1.167172) (1.98931)

R^2 = 30.54 % $t(9, 0.5\ \%) = 2.262$

(13) $D_{12(t)} = 913.94 + 234.293\ \frac{P_{12(t)}}{F_{2(t)}}$

t-test (0.90524) (0.56924)

R^2 = 3.48 % $t(9, 0.5\ \%) = 2.262$

(14) $D_{12(t)} = -9496.96 + 55.67\ N_{2(t)} - 295.61\ \frac{P_{12(t)}}{F_{2(t)}}$

t-test (-1.7324) (1.92444) (-0.64941)

R^2 = 34.02 % $t(8, 0.5\ \%) = 2.306$

(15) $D_{12(t)} = 637.531 + 0.114\ D_{12(t+1)} + 0.133\ Y_{2(t)} - 930.65\ Y_{(t)}$

t-test (1.78498) (0.5155) (2.02112) (-3.2695)

R^2 = 78.00 % $t(7, 0.5\ \%) = 2.365$

(16) $D_{12(t)} = 10465 - 0.0055\ D_{12(t-1)} + 0.347\ Y_{2(t)} - 51.79\ N_{2(t)} - 874.31\ V_{(t)}$

t-test (0.682) (-0.0185) (1.0171) (-0.6389) (-2.8177)

R^2 = 79.40 % $t(6, 0.5\ \%) = 2.447$

(17) $D_{12(t)} = -276.63 + 0.286\ D_{12(t-1)} + 0.009\ Y_{2(t)} + 578.70\ \frac{P_{12(t)}}{F_{2(t)}} - 1285.67\ V_{(t)}$

t-test (-0.448) (1.2939) (0.1052) (1.7073) (-3.9329)

R^2 = 85.19 % $t(6, 0.5\ \%) = 2.447$

(18) $D_{12(t)} = 6971.13+0.19\ D_{12(t-1)}+0.17\ Y_{2(t)}-38.01\ N_{2(t)}+555.77\ \frac{P_{12(t)}}{F_{2(t)}} - 1230.25\ Y_{(t)}$

t-test (0.4939) (0.6379) (0.5199) (-0.5141)(1.5243)

(-3.3682)

R^2 = 85.93 % t(5,0.5 %) = 2.571

(19) $D_{12(t)} = -4809.67+0.2074\ D_{12(t-1)}+28.94\ N_{2(t)}-971.50\ V_{(t)}$

t-test (-1.4367) (0.9697) (1.7603) (-3.2829)

R^2 = 75.85 % t(7,0.5 %) = 2.365

(20) $D_{12(t)} = -308.25+0.301\ D_{12(t-1)}+606.45\ \frac{P_{12(t)}}{F_{2(t)}} -1305.25\ V_{(t)}$

t-test (-0.6108) (1.944) (3.0725) (-5.2398)

R^2 = 85.16 % t(7,0.5 %) = 2.365

(21) $D_{12(t)} = -66.94+0.307\ D_{12(t-1)}-1.36\ N_{2(t)}+622.04\ \frac{P_{12(t)}}{F_{2(t)}}$

$-1314.83\ V_{(t)}$

t-test (-0.0179) (1.632) (-0.06523) (1.943) (-4.2899)

R^2 = 85.17 % t(6,0.5 %) = 2.447

(22) $D_{12(t)} = 178.875+0.243\ Y_{2(t)}-697.275\ V_{(t)}$

t-test (0.007) (3.799) (-2.984)

R^2 = 65.16 % t(8,0.5 %) = 2.306

(23) $D_{12(t)} = 10284.44+0.34\ Y_{2(t)}-50.85\ N_{2(t)}-874.902\ V_{(t)}$

t-test (0.9348) (1.5195) (-0.8716) (-3.0619)

$R^2 = 79.40\ \%$ $t(7,0.5\ \%) = 2.365$

(24) $D_{12(t)} = 163.54+0.089\ Y_{2(t)}+379.41\ \frac{P_{12(t)}}{F_{2(t)}}-1192.82\ V_{(t)}$

t-test (0.2999) (1.2007) (1.20006) (-3.5721)

$R^2 = 81.06\ \%$ $t(7,0.5\ \%) = 2.365$

(25) $D_{12(t)} = 12694.5+0.327\ Y_{2(t)}-67.05\ N_{2(t)}+455.61\ \frac{P_{12(t)}}{F_{2(t)}}$

$-114.94\ V_{(t)}$

t-test (1.2274) (1.5635) (-1.2132) (1.4585) (-3.5346)

$R^2 = 84.79\ \%$ $t(6,0.5\ \%) = 2.447$

(26) $D_{12(t)} = 6553.921+0.038\ N_{2(t)}- 756.988\ V_{(t)}$

t-test (-0.247) (3.816) (-3.272)

$R^2 = 66.00\ \%$ $t(8,0.5\ \%) = 2.306$

(27) $D_{12(t)} = 33.875 + 650.199\ \frac{P_{12(t)}}{F_{2(t)}} - 1423.94\ V_{(t)}$

t-test (0.0617) (2.8567) (-5.0799)

$R^2 = 77.16\ \%$ $t(8,0.5\ \%) = 2.306$

(28) $D_{12(t)} = -2542.45+14.18\ N_{2(t)}+479.65\ \frac{P_{12(t)}}{F_{2(t)}} -1301.31\ V_{(t)}$

t-test (-0.6686) (0.6852) (1.3996) (-3.8178)

R^2 = 78.59 % t(7,0.5 %) = 2.365

จากสมการข้างต้น จะเห็นได้ว่าสมการที่ (26) เป็นสมการที่เหมาะสมที่สุด โดยได้ผ่านการคัดเลือกตามหลักเกณฑ์ทางเศรษฐศาสตร์และเศรษฐมิติ สามารถนำไปใช้ในการวิเคราะห์ได้ กล่าวคือ อุปสงค์กุ้งทะเลส่งออกของไทยในประเทศสหรัฐอเมริกา จะขึ้นอยู่กับจำนวนประชากรในประเทศสหรัฐอเมริกาเป็นสำคัญ

๑.๓ <u>ประเทศฮ่องกง</u>

(1) $D_{13(t)} = 174.623-0.391\ D_{13(t-1)}+ 0.271\ V_{3(t)}$

t-test (0.6209) (-0.3048) (2.5466)

R^2 =80.16 % t(8,0.5 %) = 2.306

(2) $D_{13(t)} = -3439.32-0.5195\ D_{13(t-1)}+0.1152\ Y_{3(t)}+2375.36\ N_{3(t)}$

t-test (-1.4509) (-1.12678) (0.79764) (1.4824)

R^2 = 84.90 % t(7,0.5 %) = 2.365

(3) $D_{13(t)} = -6593.36-0.522\ D_{13(t-1)}+0.157\ Y_{3(t)}+1905.08\ N_{3(t)}-30.55$

t-test (-0.7969) (-1.0579) (0.7914) (0.7914) (0.8619) (-0.3372)

R^2 = 85.15 % t(6,0.5 %) = 2.447

(4) $D_{13(t)} = 135.186-0.393\ D_{13(t-1)}+0.334\ Y_{3(t)}-307.239\ \frac{P_{13(t)}}{F_{3(t)}}$

t-test (0.048) (-1.419) (5.110) (-1.340)

R^2 = 88.90 % t(7,0.5 %) = 2.365

(5) $D_{13(t)} = -11750.3-0.335\ D_{13(t)}+3304.4\ N_{3(t)}$

t-test (-2.9527) (-0.8953) (3.1736)

R^2 = 83.53 % t(8,0.5 %) = 2.306

(6) $D_{13(t)} = 625.95+0.806\ D_{13(t-1)}-33.46\ \frac{P_{13(t)}}{F_{3(t)}}$

t-test (1.1198) (3.7465) (-0.36671)

R^2 = 64.68 % t(8,0.5 %) = 2.306

(7) $D_{13(t)} = -1205.1-0.3668\ D_{13(t-1)}+3366.42\ N_{3(t)}+14.159\ \frac{P_{13(t)}}{F_{3(t)}}$

t-test (-2.6961) (-0.8314) (2.8480) (0.2130)

R^2 = 83.54 % t(7,0.5 %) = 2.365

(8) $D_{13(t)} = 202.124+0.1896\ Y_{3(t)}$

t-test (0.7327)(5.524)

R^2 = 78.56 % $t(9,0.5\ \%) = 2.262$

(9) $D_{13(t)} = -7170.45+0.0334\ Y_{3(t)}+2035.19\ N_{3(t)}$

t-test (-1.2359) (0.2630) (1.2720)

R^2 = 82.17 % $t(8,0.5\ \%) = 2.306$

(10) $D_{13(t)} = 521.938+0.203\ Y_{3(t)}-71.05\ \frac{P_{13(t)}}{F_{3(t)}}$

t-test (1.2729) (5.7655) (-1.0433)

R^2 = 81.13 % $t(8,0.5\ \%) = 2.306$

(11) $D_{13(t)} = -5409.30+0.073\ Y_{3(t)}+1535.22\ N_{3(t)}-29.13\ \frac{P_{13(t)}}{F_{3(t)}}$

t-test (-0.6539) (0.3985) (0.7179) (-0.3188)

R^2 = 82.42 % $t(7,0.5\ \%) = 2.365$

(12) $D_{13(t)} = -3629.61+2442.43\ N_{3(t)}$

t-test (-5.3693) (6.4057)

R^2 = 82.01 % $t(9,0.5\ \%) = 2.262$

(13) $D_{13(t)} = 1244.25+68.21 \frac{P_{13(t)}}{F_{3(t)}}$

t-test (1.4889) (0.5004)

R^2 = 2.71 % t(9,0.5 %) = 2.262

(14) $D_{13(t)} = -8626.93+2447.90\ N_{3(t)} - 4.35 \frac{P_{13(t)}}{F_{3(t)}}$

t-test (-5.0608) (5.9409) (-0.0687)

R^2 = 82.02 % t(8,0.5 %) = 2.306

จากสมการข้างต้นจะพบว่าสมการที่ (14) เป็นสมการที่เหมาะสมที่สุด โดยได้ผ่านการคัดเลือกตามหลักเกณฑ์ทางเศรษฐศาสตร์และเศรษฐมิติ สามารถนำไปใช้ในการวิเคราะห์ได้ กล่าวคือ อุปสงค์กุ้งทะเลส่งออกของไทยในประเทศฮ่องกงจะขึ้นอยู่กับรายได้ต่อหัวของประชากร ส่วนอุปสงค์กุ้งส่งออกของไทยในปีก่อน และราคากุ้งต่อดัชนีภาคหมวดอาหารจะมีอิทธิพลรองลงมา

๒. ปลาหมึกแช่แข็ง

๒.๑ ประเทศญี่ปุ่น

(1) $D_{21(t)} = -7702.57 - 0.392\ D_{21(t-1)} + 0.018\ Y_{1(t)}$

t-test (-1.8392) (-0.7454) (2.7481)

R^2 = 97.03 % t(5,0.5 %) = 2.571

(2) $D_{21(t)} = -59411.9 - 0.3302\ D_{21(t-1)} + 0.1229\ Y_{1(t)} + 515.873\ N_{1(t)}$

t-test (-0.5311) (-0.6475) (0.9136) (0.4627)

R^2 = 97.23 % t(4,0.5 %) = 2.776

(3) $D_{21(t)} = -62558.7 - 0.3861\ D_{21(t-1)} + 0.01189\ Y_{1(t)} + 549.99\ N_{1(t)} - 0.6739\ \frac{P_{21(t)}}{F_{1(t)}}$

t-test (-0.4461) (-0.5364) (0.7019) (0.3917) (-0.10005)

R^2 = 97.24 % t(3,0.5 %) = 3.182

(4) $D_{21(t)} = -7689.08 - 0.39\ D_{21(t-1)} + 0.017\ Y_{1(t)} - 0.033\ \frac{P_{21(t)}}{F_{1(t)}}$

t-test (-1.4423) (-0.6435) (2.1399) (-0.0060)

R^2 = 97.03 % t(4,0.5 %) = 2.776

(5) $D_{21(t)} = -140086.00-0.0536\ D_{21(t-1)}+1345.12\ N_{1(t)}$

t-test (-2.0833) (-0.1176) (2.1213)

R^2 = 96.46 % t(5,0.5 %) = 2.571

(6) $D_{21(t)} = 2848.16+0.88\ D_{21(t-1)}-0.896\ \frac{P_{21(t)}}{F_{1(t)}}$

t-test (1.0124) (4.7411) (0.1178)

R^2 = 92.49 % t(5,0.5 %) 2.571

(7) $D_{21(t)} = -141363-0.09839\ D_{21(t-1)}+1363.01\ N_{1(t)}-1.8098\ \frac{P_{21(t)}}{F_{1(t)}}$

t-test (-1.8457) (-0.1824) (1.8836) (-0.3036)

R^2 = 96.56 % t(4,0.5 %) = 2.776

(8) $D_{21(t)} = -4726.96+0.0122\ Y_{1(t)}$

t-test (-3.9176) (11.9493)

R^2 = 96.62 % t(6,0.5 %) = 2.447

(9) $D_{21(t)} = -59661.7+0.0069\ Y_{1(t)}+547.108\ N_{1(t)}$

t-test (-0.5769) (0.7082) (0.5312)

R^2 = 96.84 % t(5,0.5 %) = 2.571

(10) $D_{21(t)} = -4863.26+0.122\ Y_{1(t)}+0.285\ \frac{P_{21(t)}}{F_{1(t)}}$

t-test (-1.7415) (7.4016) (0.0558)

R^2 = 96.62 % t(5,0.5 %) = 2.571

(11) $D_{21(t)} = -61441.9+0.00672\ Y_{1(t)}+566.66\ N_{1(t)}-0.3808\ \frac{P_{21(t)}}{F_{1(t)}}$

t-test (-0.5013) (0.5523) (0.4622) (-0.0649)

R^2 = 96.84 % t(4,0.5 %) = 2.776

(12) $D_{21(t)} = -132339+1271.92\ N_{1(t)}$

t-test (-10.8753) (11.6441)

R^2 = 96.44 % t(4,0.5 %) = 2.776

(13) $D_{21(t)} = 14957.4-27.06\ \frac{P_{21(t)}}{F_{1(t)}}$

t-test (5.5097) (-2.2504)

R^2 = 50.32 % t(6,0.5 %) = 2.447

(14) $D_{21(t)} = -128009+1235.87\ N_{1(t)}-1.5128\ \frac{P_{21(t)}}{F_{1(t)}}$

t-test (-6.5227) (7.2909) (-0.3029)

R^2 = 96.52 % t(5,0.5 %) = 2.571

จากสมการข้างต้น จะเห็นไว่าสมการที่ (1) เป็นสมการที่เหมาะสมที่สุด โดยได้ผ่านการคัดเลือกตามหลักเกณฑ์ทางเศรษฐศาสตร์และเศรษฐมิติ สามารถนำไปใช้ในการวิเคราะห์ได้ กล่าวคือ อุปสงค์ปลาหมึกแช่แข็งส่งออกของไทยไปยังประเทศญี่ปุ่น จะขึ้นอยู่กับรายได้ต่อหัว ส่วนอุปสงค์ปลาหมึกแช่แข็งปีที่แล้วจะมีอิทธิพลรองลงมา

๒.๒ ประเทศอิตาลี

(1) $D_{24(t)} = -2832.16+0.395\ D_{24(t-1)}+0.0032\ Y_{4(t)}$

t-test (-1.0812) (0.4900) (1.4512)

R^2 = 76.22 % t(4,0.5 %) = 2.776

(2) $D_{24(t)} = 335018-0.292\ D_{24(t-1)}+0.012\ Y_{4(t)}-6343.77\ N_{4(t)}$

t-test (2.1361) (-0.4399) (2.7302) (-2.1543)

R^2 = 90.66 % t(3,0.5 %) = 3.182

(3) $D_{24(t)} = 335191-0.2904\ D_{24(t-1)}+0.012\ Y_{4(t)}-6347.88\ N_{4(t)}$

t-test (1.7387) (-0.3491) (2.1742) (-1.7500) (0.0105)

R^2 = 90.66 % t(2,0.5 %) = 4.303

(4) $D_{24(t)} = -2071.65+0.36\ D_{24(t-1)}+0.0035\ Y_{4(t)}+4.14\ \frac{P_{24(t)}}{F_{4(t)}}$

t-test (-0.3288) (0.3681) (1.0314) (-0.1375)

R^2 = 76.37 % t(3,0.5 %) = 3.182

(5) $D_{24(t)} = -63230.8+1.005\ D_{24(t-1)}+1161.28\ N_{4(t)}$

t-test (-0.6788) (1.3400) (0.6804)

R^2 = 67.47 % t(4,0.5 %) = 2.776

(6) $D_{24(t)} = -4066.64+1.154\ D_{24(t-1)}+16.56\ \frac{P_{24(t)}}{F_{4(t)}}$

t-test (-0.6729) (1.9658) (0.7321)

R^2 = 67.99 % t(4,0.5 %) = 2.776

(7) $D_{24(t)} = -36267.7+1.027\ D_{24(t-1)}+615.02\ N_{4(t)}+11.2125\ \frac{P_{24(t)}}{F_{4(t)}}$

t-test (-0.2712) (1.2029) (1.2411) (0.3289)

R^2 = 68.50 % t(3,0.5 %) = 3.182

(8) $D_{24(t)} = -3307.14+0.0041\ Y_{4(t)}$

t-test (-1.4758) (3.3516)

R^2 = 74.79 % t(5,0.5 %) = 2.571

(9) $D_{24(t)} = 302177+0.0106\ Y_{4(t)} - 5722.05\ N_{4(t)}$

t-test (2.4519) (3.8694) (-2.4790)

R^2 = 90.06 % $t(4,0.5\ \%) = 2.776$

(10) $D_{24(t)} = -1878.44+0.448\ Y_{4(t)} - 7.332\ \frac{P_{24(t)}}{F_{4(t)}}$

t-test (-0.3379) (2.8885) (-0.2871)

R^2 = 75.30 % $t(4,0.5\ \%) = 2.776$

(11) $D_{24(t)} = 305180+0.011\ Y_{4(t)} - 5785.39\ N_{4(t)} + 1.945\ \frac{P_{24(t)}}{F_{4(t)}}$

t-test (2.10305) (3.3315) (-2.1168) (0.1014)

R^2 = 90.10 % $t(3,0.5\ \%) = 3.182$

(12) $D_{24(t)} = -155337+2877\ N_{4(t)}$

t-test (-2.2951) (2.3679)

R^2 = 52.86 % $t(5,0.5\ \%) = 2.571$

(13) $D_{24(t)} = -7427.29+40.81\ \frac{P_{24(t)}}{F_{4(t)}}$

t-test (-1.0216) (1.7160)

R^2 = 37.06 % $t(5,0.5\ \%) = 2.571$

(14) $D_{24(t)} = -137342+2510.12\ N_{4(t)}+8.07\ \frac{P_{24(t)}}{F_{4(t)}}$

t-test (-1.252) (1.1867) (0.2253)

R^2 = 53.45 % t(4,0.5 %) = 2.776

จากสมการข้างต้น จะเห็นได้ว่าสมการที่ (10) มีความเหมาะสมที่สุด โดยได้ผ่านการคัดเลือกตามหลักเกณฑ์ทางเศรษฐศาสตร์และเศรษฐมิติ สามารถนำไปใช้ในการวิเคราะห์ได้ กล่าวคือ อุปสงค์ปลาหมึกแช่แข็งส่งออกของไทยไปยังประเทศอิตาลีขึ้นอยู่กับรายได้ต่อหัวของประชาการในประเทศอิตาลี ส่วนราคากุ้งต่อดัชนีราคาหมวดอาหารจะมีอิทธิพลรองลงมา

๒.๓ ประเทศฮ่องกง

(1) $D_{23(t)} = 34.23-0.301\ D_{23(t-1)}+0.088\ Y_{3(t)}$

t-test (0.1638) (-1.1716) (3.7046)

R^2 = 73.76 % t(5,0.5 %) = 2.571

(2) $D_{23(t)} = 4132.93-0.34\ D_{23(t-1)}+0.16\ Y_{3(t)}-1081.97\ N_{3(t)}$

t-test (0.7674) (-1.2349) (1.6850) (-0.7616)

R^2 = 77.08 % t(4,0.5 %) = 2.776

(3) $D_{23(t)} = 1319.63-0.343\ D_{23(t-1)}+0.133\ Y_{3(t)}-332.46\ N_{3(t)} -93.75\ \frac{P_{23(t)}}{F_{3(t)}}$

t-test (0.2205)(-1.2618)(1.4790)(0.2102)(-1.0378)

R^2 = 83.14 % t(3,0.5 %) = 3.182

(4) $D_{23(t)} = 62.62-0.335\ D_{23(t-1)}+0.119\ Y_{3(t)}-102.42\ \frac{P_{23(t)}}{F_{3(t)}}$

t-test (0.3302) (-1.4265) (3.9219) (-1.4608)

R^2 = 82.89 % t(4.0.5 %) = 2.776

(5) $D_{23(t)} = -4537.13-0.2075\ D_{23(t-1)}+1223.97\ N_{3(t)}$

t-test (-2.4373) (-0.6738) (2.4757)

R^2 = 60.82 % t(5,0.5 %) = 2.571

(6) $D_{23(t)} = 352.06+0.018\ D_{23(t-1)}+93.29\ \frac{P_{23(t)}}{F_{3(t)}}$

t-test (1.024) (0.0422) (0.9623)

R^2 = 17.09 % t(5,0.5 %) = 2.571

(7) $D_{23(t)} = -6831.51-0.232\ D_{23(t-1)}+1835.80\ N_{3(t)}-118.54\ \frac{P_{23(t)}}{F_{3(t)}}$

t-test (-2.5728) (-0.7789) (2.7154) (-1.1726)

R^2 = 70.84 % t(4,0.5 %) = 2.776

(8) $D_{23(t)} = -43.33+0.075\ Y_{3(t)}$

t-test (-0.2121) (3.455)

$R^2 = 66.55\ \%$ $t(6,0.5\ \%) = 2.447$

(9) $D_{23(t)} = 2914.53+0.123\ Y_{3(t)}-782.55\ N_{3(t)}$

t-test (0.5236) (1.3234) (-0.5318)

$R^2 = 68.35\ \%$ $t(5,0.5\ \%) = 2.571$

(10) $D_{23(t)} = -24.82+0.103\ Y_{3(t)}-93.22\ \frac{P_{23(t)}}{F_{3(t)}}$

t-test (-0.1259) (3.3261) (-1.2154)

$R^2 = 74.18\ \%$ $t(5,0.5\ \%) = 2.571$

(11) $D_{23(t)} = 136.811+0.11\ Y_{3(t)}- 42.82\ N_{3(t)}- 92.07\ \frac{P_{23(t)}}{F_{3(t)}}$

t-test (0.0216) (1.097) (-0.0255) (-0.9514)

$R^2 = 74.19\ \%$ $t(4,0.5\ \%) = 2.776$

(12) $D_{23(t)} = -4144.68+1103.19\ N_{3(t)}$

t-test (-2.4592) (2.8351)

$R^2 = 57.26\ \%$ $t(6,0.5\ \%) = 2.447$

(13) $D_{23(t)} = 360.107 + 94.44 \frac{P_{23(t)}}{F_{3(t)}}$

t-test (1.3733) (1.1103)

R^2 = 17.06 % t(6,0.5 %) = 2.447

(14) $D_{23(t)} = -6288.40 + 1673.04 N_{3(t)} - 113.03 \frac{P_{23(t)}}{F_{3(t)}}$

t-test (-2.5570) (2.7109) (-1.1678)

R^2 = 66.42 % t(5,0.5 %) = 2.571

จากสมการข้างต้น จะพบว่าสมการที่ (4) มีความเหมาะสมมากที่สุด โดยได้ผ่านการคัดเลือกตามหลักเกณฑ์ทางเศรษฐศาสตร์และเศรษฐมิติ กล่าวคือ อุปสงค์ปลาหมึกแช่แข็งส่งออกของไทยไปยังประเทศฮ่องกงจะขึ้นอยู่กับรายได้ต่อหัวของประชากรในประเทศฮ่องกง ส่วนราคาปลาหมึกต่อดัชนีราคาหมวดอาหารและอุปสงค์ปลาหมึกปีที่แล้วจะมีอิทธิพลรองลงมา

๓. ปลาสดแช่แข็ง

๓.๑ ประเทศมาเลเซีย

(1) $D_{35(t)} = 1484.97+0.1603\ D_{35(t-1)}+11.8259\ Y_{5(t)}$

t-test (0.1377) (0.2587) (1.6349)

R^2 = 77.37 % t(4,0.5 %) = 2.776

(2) $D_{35(t)} = 57761+0.0242\ D_{35(t-1)}+4.1799\ Y_{5(t)}+6500.5\ N_{5(t)}$

t-test (-0.3534) (0.03048) (0.1850) (0.3630)

R^2 = 73.80 % t(3,0.5 %) = 3.182

(3) $D_{35(t)} = -47492.6+0.0931\ D_{35(t-1)}+5.3796\ Y_{5(t)}+4794.58\ N_{5(t)}$
$+28212.3\ \frac{P_{35(t)}}{F_{5(t)}}$

t-test (-0.2421) (0.0967) (0.1991) (0.22001) (0.3591)

R^2 = 80.09 % t(2,0.5 %) = 4.303

(4) $D_{35(t)} = -4501.21+0.1979\ D_{35(t-1)}+10.911\ Y_{5(t)}+31984.8\ \frac{P_{35(t)}}{F_{5(t)}}$

t-test (-0.3052) (0.2865) (1.3271) (0.5048)

R^2 = 79.60 % t(3,0.5 %) = 3.182

(5) $D_{35(t)} = 85344.1+0.0002\ D_{35(t-1)}+9589.07\ N_{5(t)}$

t-test (-1.626) (0.0004) (1.6992)

R^2 = 78.56 % t(4,0.5 %) = 2.776

(6) $D_{35(t)} = -6736.55 + 0.9914\ D_{35(t-1)} + 5052.4\ \frac{P_{35(t)}}{F_{5(t)}}$

t-test (-0.4214) (2.6245) (0.7493)

R^2 = 67.63 % $t(4,0.5\ \%) = 2.776$

(7) $D_{35(t)} = -83736.5 + 0.05801\ D_{35(t)} + 8825.61\ N_{5(t)} + 26279.1 \frac{P_{35(t)}}{F_{5(t)}}$

t-test (-1.4072) (0.0744) (1.3349) (0.4088)

R^2 = 79.69% $t(3,0.5\ \%) = 3.182$

(8) $D_{35(t)} = 2279.83 + 13.45\ Y_{5(t)}$

t-test (0.3468) (4.1501)

R^2 =77.50 % $t(5,0.5\ \%) = 2.571$

(9) $D_{35(t)} = -60016.00 + 4.0676\ Y_{5(5(t)} + 6758.27\ N_{5(t)}$

t-test (-0.4754) (0.2106) (0.4942)

R^2 = 73.80 % $t(4,0.5\ \%) = 2.776$

(10) $D_{35(t)} = -3164.86 + 12.9489\ Y_{5(t)} + 30027.3\ \frac{P_{35(t)}}{F_{5(t)}}$

t-test (-0.2576) (3.5805) (0.5431)

R^2 = 79.05 % $t(3,0.5\ \%) = 3.182$

(11) $D_{35(t)} = -56370+4.9003\ Y_{5(t)}+5837.57\ N_{5(t)}+26696.3\ \frac{P_{35(t)}}{F_{5(t)}}$

t-test (-0.3974) (0.2254) (0.3769) (0.4237)

R^2 = 79.99 % t(3,0.5 %) = 3.182

(12) $D_{35(t)} = -35859.9+ 9590.92\ N_{5(t)}$

t-test (-31992) (4.2304)

R^2 = 78.56 % t(5,0.5%) = 2.571

(13) $D_{35(t)} = -37425.7-9266.52\ N_{5(t)}+ 25412.7\ \frac{P_{35(t)}}{F_{5(t)}}$

t-test (-2.9711) (3.650) (0.4637)

R^2 = 11.39 % t(5,0.5 %) = 2.571

จากสมการข้างต้น จะพบว่าสมการที่ (8) มีความเหมาะสมมากที่สุด โดยได้ผ่านการคัดเลือกตามหลักเกณฑ์ของเศรษฐศาสตร์และเศรษฐมิติแล้ว กล่าวคือ อุปสงค์ปลาสดแช่แข็งส่งออกของไทยไปยังประเทศมาเลเซียจะขึ้นอยู่กับรายได้ต่อหัวของประชากรในประเทศมาเลเซีย เป็นสำคัญ

๓.๒ ประเทศญี่ปุ่น

(1) $D_{31(t)} = 844.03+0.166\ D_{31(t-1)}+0.002\ Y_{1(t)}$

t-test (-1.1433) (1.1698) (3.7354)

R^2 78.18 % t(4,0.5 %) = 2.776

(2) $D_{31(t)} = -34561.6 + 0.269\ D_{31(t-1)} - 0.006\ Y_{1(t)} + 832.44\ N_{1(t)}$

t-test (-1.619) (1.9754) (-1.1928) (1.6038)

R^2 = 88.25 % $t(3, 0.5\ \%) = 3.182$

(3) $D_{31(t)} = 34944.3 - 0.373\ D_{31(t-1)} + 0.004\ Y_{1(t)} - 311.16\ N_{1(t)} - 14.27\ \frac{P_{31(t)}}{F_{1(t)}}$

t-test (0.2174) (-0.453) (0.3009) (-0.2012) (-0.7926)

R^2 = 91.06 % $t(2, 0.5\ \%) = 4.303$

(4) $D_{31(t)} = 2535.78 - 0.216\ D_{31(t-1)} + 0.0014\ Y_{1(t)} - 10.88\ \frac{P_{31(t)}}{F_{1(t)}}$

t-test (1.4639) (-1.005) (2.7082) (-2.0438)

R^2 = 90.88 % $t(3, 0.5\ \%) = 3.182$

(5) $D_{31(t)} = -22625.3 + 0.1945\ D_{31(t-1)} + 215.97\ N_{1(t)}$

t-test (-4.0137) (1.5284) (4.3151)

R^2 = 82.68 % $t(4, 0.5\ \%) = 2.776$

(6) $D_{31(t)} = 6428.15 - 0.559\ D_{31(t-1)} - 19.71\ \frac{P_{31(t)}}{F_{1(t)}}$.

t-test (3.8016) (-2.0093) (-2.9102)

R^2 = 88.58 % $t(4, 0.5\ \%) = 2.776$

(7) $D_{31(t)} = -13355.7 - 0.1401\ D_{31(t-1)} + 153.513\ N_{1(t)} - 9.27\ \frac{P_{31(t)}}{F_{1(t)}}$

t-test (-1.7789) (-0.5955) (2.6619) (-1.6000)

R^2 = 90.66 % t(3,0.5 %) = 3.182

(8) $D_{31(t)} = -392.99 + 0.0019\ Y_{1(t)}$

t-test (-0.6025) (3.4747)

R^2 =70.72% t(5,0.5 %) = 2.571

(9) $D_{31(t)} -35180 - 0.0014\ Y_{1(t)} + 347.07\ N_{1(t)}$

t-test (-0.5844) (-.2447) (0.5779)

R^2 = 72.97 % t(4,0.5 %) = 2.776

(10) $D_{31(t)} = 975.11 + 0.017\ Y_{1(t)} - 6.23\ \frac{P_{31(t)}}{F_{1(t)}}$

t-test (1.3085) (4.0875) (-2.3677)

R^2 = 87.81 % t(4,0.5%) = 2.776

(11) $D_{31(t)} = -34426 - 0.0017\ Y_{1(t)} + 353.23\ N_{1(t)} - 6.24\ \frac{P_{31(t)}}{F_{1(t)}}$

t-test (-0.8200) (-0.[illegible]44) (0.8434) (-2.2860)

R^2 = 90.14 % t(3,0.5 %) = 3.182

(12) $D_{31(t)} = -20542+200.36\ N_{1(t)}$

t-test (-3.3407) (3.637)

R^2 = 72.57 % t(5,0.5 %) = 2.571

(13) $D_{31(t)} = 3371.55- 8.86\ \frac{P_{31(t)}}{F_{1(t)}}$

t-test (3.6013) (-1.7089)

R^2 = 36.87 % t(5,0.5 %) = 2.571

(14) $D_{31(t)} = -16737+176.458\ N_{1(t)} -6.20\ \frac{P_{31(t)}}{F_{1(t)}}$

t-test (-3.7209) (4.491) (-2.5498)

R^2 = 80.55 % t(4,0.5 %) = 2.776

สมการข้างต้นจะพบว่าสมการที่(10) มีความเหมาะสมมากที่สุด โดยได้ผ่านการคัดเลือกตามหลักเกณฑ์ทางเศรษฐศาสตร์และเศรษฐมิติแล้ว กล่าวคือ อุปสงค์ปลาสดแช่แข็งส่งออกของไทยไปยังประเทศญี่ปุ่น จะขึ้นอยู่กับรายได้ต่อหัวของประชากรในประเทศญี่ปุ่น ส่วนราคาปลาสดแช่แข็งต่อดัชนีราคาหมวดอาหารจะมีอิทธิพลรองลงมา

รูปแบบจำลองที่ ๒

๑. กุ้งทะเลแช่แข็ง

๑.๑ ประเทศญี่ปุ่น

(1) $D_{11(t)} = 5017.96+0.3419\ D_{11(t-1)} + 0.0001\ Y_{1(t)}$

t-test (2.0701) (0.7550) (0.0516)

R^2 = 14.69 % t(8,0.5 %) = 2.306

(2) $D_{11(t)} = -35526.1-0.1733\ D_{11(t-1)} -0.1264\ Y_{1(t)} +418.45\ N_{1(t)}$

t-test (-2.3317) (-0.4436) (-0.8234) (2.6802)

R^2 = 57.90 % t(7,0.5 %) = 2.365

(3) $D_{11(t)} = -40155.3-0.1672\ D_{11(t-1)} -0.0012\ Y_{1(t)} +470.15\ N_{1(t)}$
$-1.1224\ P_{11(t)}$

t-test (-1.8212) (-0.3991) (-0.7095) (1.9986) (-0.3126)

R^2 = 58.57 % t(6,0.5 %) = 2.447

(4) $D_{11(t)} = 3686.27+0.0982\ D_{11(t-1)} -0.0008\ Y_{1(t)} +3.9227\ P_{11(t)}$

t-test (1.4454) (0.2067) (-0.3932) (1.2859)

R^2 = 30.99 % t(7,0.5 %) = 2.365

(5) $D_{11(t)} = -30934.2 - 0.3155\ D_{11(t-1)} + 375.85\ N_{1(t)}$

t-test (-2.2270) (-0.9189) (2.6045)

R^2 = 53.82 % t(8,0.5 %) = 2.306

(6) $D_{11(t)} = 4109.43 + 0.0055\ D_{11(t-1)} + 3.5088\ P_{11(t)}$

t-test (1.88793) (0.0141) (1.2959)

R^2 = 29.47 % t(8,0.5 %) = 2.306

(7) $D_{11(t)} = -37629.2 - 0.2947\ D_{11(t-1)} + 449.86\ N_{1(t)} - 1.5248\ P_{11(t)}$

t-test (-1.7949) (-0.8075) (1.9989) (-0.4463)

R^2 = 55.10 % t(7,0.5 %) = 2.365

(8) $D_{11(t)} = 6596.18 + 0.0012\ Y_{1(t)}$

t-test (5.5075) (0.9208)

R^2 = 8.61 % t(9,0.5 %) = 2.262

(9) $D_{11(t)} = -32830.7 - 0.0016\ Y_{1(t)} + 384.37\ N_{1(t)}$

t-test (-2.477) (-1.1982) (2.9817)

R^2 = 56.71 % t(8,0.5 %) = 2.306

(10) $D_{11(t)} = 3931.30-0.0006\ Y_{1(t)} + 4.1744\ P_{11(t)}$

t-test (2.0093) (-0.3569) (1.5907)

R^2 = 30.57 % t(8,0.5 %) = 2.306

(11) $D_{11(t)} = -37833.8 - 0.0015\ Y_{1(t)} + 440.40\ N_1(t) - 1.1888\ P_{11(t)}$

t-test (-1.8974) (-1.039) (2.1043) (-0.3534)

R^2 = 57.47 % t(7,0.5 %) = 2.365

(12) $D_{11(t)} = -22362.6+275.81\ N_{1(t)}$

t-test (-2.1918) (2.9373)

R^2 43.94 % t(9,0.5 %) = 2.262

(13) $D_{11(t)} = 4123.19+3.5356\ P_{11(t)}$

t-test (2.2346) (1.9389)

R^2 = 29.46 % t(9,0.5 %) = 2.262

(14) $D_{11(t)} = -31303.4 +375.08\ N_{1(t)} - 1.3777\ P_{11(t)}$

t-test (-1.6480) (1.8697) (-0.5665)

R^2 = 50.91 % t (8 , 0.5 %) = 2.306

(15) $D_{11(t)} = 4448.43+0.0171\ D_{11(t-1)}-0.0009\ Y_{1(t)}+26.53\ F_{1(t)}$

t-test (2.0020) (0.0376) (-0.5086) (1.6595)

R^2 = 38.77 % $t(7,0.5\ \%) = 2.365$

(16) $D_{11(t)} = -99306.2-0.2593\ D_{11(t-1)}-0.0011\ Y_{1(t)}+1095.39\ N_{1(t)}$
$-61.05\ F_{1(t)}$

t-test (-2.5835) (-0.7509) (-0.7927) (2.701) (-1.7728)

R^2 = 72.37 % $t(6,0.5\ \%) = 2.447$

(17) $D_{11(t)} = 4464.624+0.01748\ D_{11(t-1)}-0.0009\ Y_{1(t)}-0.0673\ P_{11(t)}$
$+26.84\ F_{1(t)}$

t-test (1.6274) (0.0355) (-0.4662) (-0.0121) (0.8734)

R^2 = 33.78 % $t(6,0.5\ \%) = 2.447$

(18) $D_{11(t)} = -120455-0.3382\ D_{11(t-1)}-0.0013\ Y_{1(t)}+1300.47\ N_{1(t)}$
$+4.691\ P_{11(t)}-99.04\ F_{1(t)}$

t-test (-2.934) (-0.9957) (-0.9823) (3.045) (1.201) (-2.1584)

R^2 = 78.55 % $t(5,0.5\ \%) = 2.571$

(19) $D_{11(t)} = -98303.8-0.3819\ D_{11(t-1)}+1084.4\ N_{1(t)}-63.29\ F_{1(t)}$

t-test (-2.6181) (-1.2708) (2.7494) (-1.8948)

R^2 = 69.48 % $t(7,0.5\ \%) = 2.365$

(20) $D_{11(t)} = 4934.08 - 0.0898\ D_{11(t-1)} - 0.3659\ P_{11(t)} + 25.51\ F_{1(t)}$

t-test (2.052) (-0.2192) (-0.0707) (0.8846)

R^2 = 36.56 % $t(7, 0.5\ \%) = 2.365$

(21) $D_{11(t)} = -116297 - 0.4742\ D_{11(t)} + 1263.84\ N_{1(t)} + 4.1503\ P_{11(t)}$

$-97.31\ F_{1(t)}$

t-test (-2.856) (1.533) (2.979) (1.076) (-2.128)

R^2 = 74.41 % $t(6, 0.5\ \%) = 2.447$

(22) $D_{11(t)} = 4507.11 - 0.0009\ Y_{1(t)} + 26.79\ F_{1(t)}$

t-test (3.046) (-0.5975) (1.9847)

R^2 = 38.76 % $t(8, 0.5\ \%) = 2.306$

(23) $D_{11(t)} = -92027.8 - 0.0015\ Y_{1(t)} + 1005.13\ N_{1(t)} - 57.42\ F_{1(t)}$

t-test (-2.553) (-1.303) (2.679) (-1.739)

R^2 = 69.77 % $t(7, 0.5\ \%) = 2.365$

(24) $D_{11(t)} = 4521.32 - 0.0009\ Y_{1(t)} - 0.0545\ P_{11(t)} + 27.04\ F_{1(t)}$

t-test (2.1882) (-0.5494) (-0.011) (0.9678)

R^2 = 38.76% $t(7, 0.5\ \%) = 2.365$

(25) $D_{11(t)} = -107378-0.0018\ Y_{1(t)}+1154.26\ N_{1(t)}+3.938\ P_{11(t)}-88.39\ F_{1(t)}$

t-test = (-2.7622) (-1.521) (2.8805) (1.028) (-1.9823)

R^2 = 74.30 % t(6,0.5 %) = 2.447

(26) $D_{11(t)} = -32807.3+909.62\ N_{1(t)}- 58.34\ F_{1(t)}$

t-test (-2.247) (2.371) (-1.6948)

R^2 = 62.43 % t(8,0.5 %) = 2.306

(27) $D_{11(t)} = 4671.21-0.5198\ P_{11(t)}+ 23.84\ F_{1(t)}$

t-test (2.387) (-0.1081) (0.913)

R^2 = 36.12 % t(8,0.5 %) = 2.306

(28) $D_{11(t)} = 91422.6+992.57\ N_{1(t)}+2.51\ P_{11(t)}-78.19\ F_{1(t)}$

t-test (-2.241) (2.3573) (0.6203) (-1.628)

R^2 = 64.39 % t(7,0.5 %) = 2.365

๑.๒ ประเทศสหรัฐอเมริกา

(1) $D_{12(t)} = 257.22 + 0.1882\ D_{12(t-1)} + 1.6649\ Y_{1(t)}$

t-test (0.512) (0.572) (1.7159)

R^2 = 44.40 % t(8,0.5 %) = 2.306

(2) $D_{12(t)} = 22452.5 - 0.093\ D_{12(t-1)} + 0.643\ Y_{2(t)} - 116.69\ N_{2(t)}$

t-test (1.076) (-0.221) (1.4041) (-1.064)

R^2 = 52.14 % t(7,0.5 %) = 2.365

(3) $D_{12(t)} = 22277.7 - 0.0931\ D_{12(t-1)} + 0.647\ Y_{2(t)} - 115.80\ N_{2(t)} - 11.51\ P_{12(t)}$

t-test (0.951) (-0.205) (1.238) (-0.943) (-0.027)

R^2 = 52.14 % t(6,0.5 %) = 2.447

(4) $D_{12(t)} = 190.44 + 0.161\ D_{12(t-1)} + 0.251\ Y_{2(t)} - 117.44\ P_{12(t)}$

t-test (0.3276) (0.444) (0.815) (-0.289)

R^2 = 45.06 % t(7,0.5 %) = 2.365

(5) $D_{12(t)} = -6093.49 + 0.324\ D_{12(t-1)} + 33.83\ N_{2(t)}$

t-test (-1.229) (1.029) (1.3859)

R^2 = 36.86 % t(8,0.5 %) = 2.306

(6) $D_{12(t)} = 450.64+0.286\ D_{12(t-1)}+193.75\ P_{12(t)}$

t-test (0.9435) (0.8947) (1.4544)

R^2 = 39.84 % t(8,0.5 %) = 2.306

(7) $D_{12(t)} = -868.23+0.289\ D_{12(t-1)}+6.7839\ N_{2(t)}+158.59\ P_{12(t)}$

t-test (-0.0592) (0.8422) (0.0899) (0.3814)

R^2 = 39.91 % t(7,0.5 %) = 2.365

(8) $D_{12(t)} = 352.08 + 0.1976\ Y_{2(t)}$

t-test (0.7722) (2.5593)

R^2 = 42.12 % t(9,0.5 %) = 2.262

(9) $D_{12(t)} = 1553.1 +0.5714\ Y_{2(t)}-101.48\ N_{2(t)}$

t-test = (1.291) (1.8788) (-1.2678)

R^2 = 51.31 % t(8,0.5 %) = 2.306

(10) $D_{12(t)} = 239.58+0.309\ Y_{2(t)}-164.16\ P_{12(t)}$

t-test (0.443) (1.1709) (-0.4421)

R^2 = 43.50 % t(8,0.5 %) = 2.306

(11) $D_{12(t)} = 19402.3+0.574\ Y_{2(t)}-100.82\ N_{2(t)}-7.727\ P_{12(t)}$

t-test (1.1116) (1.616) (-1.098) (-0.0196)

R^2 = 51.31 % t(7,0.5 %) = 2.365

(12) $D_{12(t)} = -7821.27+44.29\ N_{2(t)}$

t-test (-1.6717) (1.9393)

R^2 = 30.54 % t(9,0.5 %) = 2.262

(13) $D_{12(t)} = 689.62+249.59\ P_{12(t)}$

t-test (1.7730) (2.1447)

R^2 = 33.82 % t(9,0.5 %) = 2.262

(14) $D_{12(t)} = 646.55+0.2221\ N_2+248.46\ P_{12(t)}$

t-test (0.0452) (0.0030) (0.6296)

R^2 = 33.82 % t(8,0.5 %) = 2.306

(15) $D_{12(t)} = 246.39+0.183\ D_{12(t-1)}+0.144\ Y_{2(t)}+1.164\ F_{2(t)}$

t-test (0.425) (0.501) (0.312) (0.0496)

R^2 = 44.42 % t(7,0.5 %) = 2.365

(16) $D_{12(t)} = 52669.1 - 0.664\ D_{12(t-1)} + 0.459\ Y_{2(t)} - 277.625\ N_{2(t)} + 42148\ F_{2(t)}$

t-test (1.781) (-1.154) (1.015) (±1.7734) (1.3691)

R^2 = 63.53 % $t(6,0.5\ \%) = 2.447$

(17) $D_{12(t)} = 163.45 + 0.148\ D_{12(t-1)} + 0.2074\ Y_{2(t)} - 124.98\ P_{12(t)} + 2.439\ F_{2(t)}$

t-test (0.237) (0.3616) (0.3717) (-0.2811) (0.0955)

R^2 = 45.14 % $t96,0.5\ \%) = 2.447$

(18) $D_{12(t)} = 52765.2 - 0.663\ D_{12(t-1)} + 0.457\ Y_{2(t)} - 278.11\ N_{2(t)} + 5.588\ P_{12(t)} + 42.49\ F_{2(t)}$

t-test (1.5927) (-1.053) (0.874) (-1.538) (0.0137) (1.249)

R^2 = 63.53 % $t(5,0.5\ \%) = 2.571$

(19) $D_{12(t)} = 40722.8 - 0.518\ D_{12(t-1)} - 214.98\ N_{2(t)} + 51.83\ F_{2(t)}$.

t-test (1.498) (-0.928) (-1.491) (1.7452)

R^2 = 57.26 % $t(7,0.5\ \%) = 2.365$

(20) $D_{12(t)}$ $=155.04+0.147\ D_{12(t-1)}-57.64\ P_{12(t)}+10.08\ F_{2(t)}$

t-test (0.2407) (0.3818) (-0.1516) (0.7094)

R^2 = 43.88 % $t(7,0.5\ \%) = 2.365$

(21) $D_{12(t)}$ $= 44043.1-0.532\ D_{12(t-1)}-232.09\ N_{2(t)}+118.91\ P_{12(t)}$
$+51.17\ F_{2(t)}$

t-test (1.4223) (-0.3879) (-1.4176) (0.3157) (1.605)

R^2 = 57.96 % $t(6,0.5\ \%) = 2.447$

(22) $D_{12(t)}$ $= 301.51+0.1074\ Y_{2(t)}+4.404\ F_{2(t)}$

t-test (0.5568) (0.2403) (0.2055)

R^2 = 42.43 % $t(8,0.5\ \%) = 2.306$

(23) $D_{12(t)}$ $= 24276.1+0.329\ Y_{2(t)}-127.59\ N_{2(t)}+16.51\ F_{2(t)}$

t-test (1.4469) (0.7346) (-1.4296) (0.7552)

R^2 = 55.44 % $t(7,0.5\ \%) = 2.365$

(24) $D_{12(t)}$ $= 172.46+0.205\ Y_{2(t)}-172.85\ P_{12(t)}+5.326\ F_{2(t)}$

t-test (0.2679) (0.3929) (-0.4352) (0.2345)

R^2 = 43.94 % $t(7,0.5\ \%) = 2.365$

(25) $D_{12(t)} = 24415.3+0.326\ Y_{2(t)}-128.30\ N_{2(t)}+7.923\ P_{12(t)}+16.54\ F_{2(t)}$

t-test (1.2524) (0.6362) (-1.244) (0.0194) (0.6992)

R^2 = 55.44 % t(6,0.5 %) = 2.447

(26) $D_{12(t)} = 19909.1-104.88\ N_{2(t)}+28.02\ F_{2(t)}$

t-test (1.3071) (-1.291) (1.8912)

R^2 = 52.00% t(8,0.5 %) = 2.306

(27) $D_{12(t)} = 164.04-105.69\ P_{12(t)}+12.85\ F_{2(t)}$

t-test (0.269) (-0.3117) (1.1139)

R^2 = 42.71 % t(8,0.5 %) = 2.306

(28) $D_{12(t)} = 22055-115.87\ N_{2(t)}+93.25\ P_{12(t)}+26.97\ F_{2(t)}$

t-test (1.2047) (-1.1964) (0.2522) (1.655)

R^2 = 52.43 % t(7,0.5 %) = 2.365

๑.๓ ประเทศฮ่องกง

(1) $D_{13(t)} = 174.62-0.391\ D_{13(t-1)}+0.271\ Y_{2(t)}$

t-test (0.6209) (-0.8048) (2.5466)

R^2 = 80.16 % t(3,0.5 %) = 2.306

(2) $D_{13(t)} = -3439.32-0.5195\ D_{13(t-1)}+0.1152\ Y_{3(t)}+2375.36\ N_{3(t)}$

t-test (-1.451) (-1.127) (0.7976) (1.4824)

R^2 = 84.90 % t(7,0.5 %) = 2.365

(3) $D_{13(t)} = -4254.67-0.4302\ D_{13(t-1)}+0.2146\ Y_{3(t)}+1313.64\ N_{3(t)}$
$-94.58\ P_{13(t)}$

t-test (-0.4927) (-0.8647) (1.0233) (0.5749) (-0.6797)

R^2 = 85.98 % t(6,0.5 %) = 2.447

(4) $D_{13(t)} = 702.43-0.341\ D_{13(t-1)}+0.318\ Y_{3(t)}- 149.26\ P_{13(t)}$

t-test (1.637) (0.758) (3.093) (-1.546)

R^2 = 85.21 % t(7,0.5 %) = 2.365

(5) $D_{13(t)} = -11750.3-0.335\ D_{13(t-1)}+3304.40\ N_{3(t)}$

t-test (-2.952) (-0.859) (3.074)

R^2 = 83.53 % t(8,0.5 %) = 2.306

(6) $D_{13(t)}$ = 698.9340.885 $D_{13(t-1)}$-60.61 $P_{13(t}$

t-test (1.152) (2.9031) (-0.4567)

R^2 = 65.00 % t(8,0.5 %) = 2.306

(7) $D_{13(t)}$ = -11316.5-0.347 $D_{13(t-1)}$+3317.37 $N_{3(t)}$+4.722 $P_{13(t)}$

t-test (-2.6377) (-0.705) (2.307) (0.0472)

R^2 = 83.54 % t(7,0.5 %) = 2.365

(8) $D_{13(t)}$ = 202.1240.189 $Y_{3(t)}$

t-test (0.738) (5.742)

R^2 = 78.56 % t(9,0.5 %) = 2.262

(9) $D_{13(t)}$ = -7170.4540.0334 $Y_{3(t)}$+2035.19 $N_{3(t)}$

t-test (-1.236) (0.263) (1.272)

R^2 = 82.17 % t(8,0.5 %) = 2.306

(10) $D_{13(t)}$ = 744.3540.249 $Y_{3(t)}$-154.54 $P_{13(t)}$

t-test (1.300) (5.2375) (-1.649)

R^2 = 84.00 % t(8,0.5 %) = 2.306

(11) $D_{13(t)} = -1371.6+0.1849\ Y_{3(t)}+694.96\ N_{3(t)}-126.34\ P_{13(t)}$

t-test (-0.233) (0.911) (0.3262) (-0.959)

R^2 = 84.24 % t(7,0.5 %) = 2.365

(12) $D_{13(t)} = -8629.61+2442.43\ N_{3(t)}$

t-test (-5.369) (6.405)

R^2 = 82.01 % t(9,0.5 %) = 2.262

(13) $D_{13(t)} = 192.65 +225.41\ P_{13(t)}$

t-test (0.2407) (1.3742)

R^2 = 28.07 % t(9,0.5 %) = 2.262

(14) $D_{13(t)} = -8976.22+2575.35\ N_{3(t)}-32.97\ P_{13(t)}$

t-test (-4.733) (4.9636) (-0.4028)

R^2 = 32.37 % t(8,0.5 %) = 2.306

(15) $D_{13(t)} = -12.07-0.449\ D_{13(t)}+0.2775\ Y_{3(t)}+1.986\ F_{3(t)}$

t-test (-0.017) (-0.8116) (2.406) (0.2918)

R^2 = 80.40 % t(7,0.5 %) = 2.365

(16) $D_{13(t)} = -9185.62 - 0.467\ D_{13(t-1)} + 0.0901\ Y_{3(t)} + 2640.22\ N_{3(t)} - 2.273\ F_{3(t)}$

t-test (-1.381) (-0.899) (0.5202) (1.337) (-0.321)

R^2 = 85.16 % t(6,0.5 %) = 2.447

(17) $D_{13(t)} = 1467.40 - 0.1488\ D_{13(t-1)} + 0.316\ Y_{3(t)} - 208.74\ P_{13(t)} - 5.899\ F_{3(t)}$

t-test (1.3307) (-0.2322) (2.9875) (-1.649) (-0.7614)

R^2 = 36.51 % t(6,0.5 %) = 2.447

(18) $D_{13(t)} = -3607.81 - 0.237\ D_{13(t-1)} + 0.211\ Y_{3(t)} + 1348.12\ N_{3(t)} - 153.56\ P_{13(t)} - 5.99\ F_{3(t)}$

t-test (-0.3992) (-0.409) (0.964) (0.566) (-0.925) (-0.728)

R^2 = 87.33 % t(5,0.5 %) = 2.571

(19) $D_{13(t)} = 11795.3 - 0.314\ D_{13(t-1)} + 3412.97\ N_{3(t)} - 3.941\ F_{3(t)}$

t-test (-2.356) (-0.776) (3.027) (-0.657)

R^2 = 84.49 % t(7,0.5 %) = 2.365

(20) $D_{13(t)} = 1507.5+1.083\ D_{13(t-1)}-123.83\ P_{13(t)}\ -6.235\ F_{3(t)}$

t-test (0.941) (2.255) (-0.687) (-0.5512)

R^2 = 66.45 % $t(7,0.5\ \%) = 2.365$

(21) $D_{13(t)} = -11006.7-0.149\ D_{13(t-1)}+3315.36\ N_{3(t)}-58.04\ P_{13(t)}$

$-6.187\ F_{3(t)}$

t-test (-2.313) (-0.262) (2.718) (-0.438) (-0.756)

R^2 = 84.97 % $t(6,0.5\ \%) = 2.447$

(22) $D_{13(t)} = 201.62+0.189\ Y_{3(t)}+0.005\ F_{3(t)}$

t-test (0.3145) (4.893) (0.0009)

R^2 = 78.56 % $t(8,0.5\ \%) = 2.306$

(23) $D_{13(t)} = -8806.584+0.0013\ Y_{3(t)}+2595.13\ N_{3(t)}-4.268\ F_{3(t)}$

t-test (-1.3456) (0.0126) (1.3824) (-0.6417)

R^2 = 83.16 % $t(7,0.5\ \%) = 2.365$

(24) $D_{13(t)} = 1617.14+0.293\ Y_{3(t)}-221.05\ P_{13(t)}-6.943\ F_{3(t)}$

t-test (1.805) (4.761) (-1.996) (-1.094)

R^2 = 36.34 % $t(7,0.5\ \%) = 1.365$

(25) $D_{13(t)} = -2397.66+0.1967\ Y_{3(t)}+1085.58\ N_{3(t)}-182.54\ P_{13(t)}$

$-7.519\ F_{3(t)}$

t-test (-0.303) (0.9822) (0.5103) (-1.3102) (-1.1054)

R^2 = 86.90 % t(6,0.5 %) = 2.447

(26) $D_{13(t)} = -3835.75+2617.99\ N_{3(t)}-4.297\ F_{3(t)}$

t-test (-5.271) (5.7152) (-0.7374)

R^2 = 83.16 % t(8,0.5 %) = 2.306

(27) $D_{13(t)} = -1239.43+223.89\ P_{13(t)}+12.84\ F_{3(t)}$

t-test (-0.9677) (1.956) (1.3909)

R^2 = 42.38 % t(8,0.5 %) = 2.306

(28) $D_{13(t)} = -9907.05+3061.26\ N_{3(t)}-80.87\ P_{23(t)}-7.166\ F_{3(t)}$

t-test (-4.7713) (4.435) (-0.3694) (-1.0575)

R^2 = 84.80 % t(7,0.5 %) = 2.365

๒. ปลาสดแช่แข็ง

๒.๑ ประเทศญี่ปุ่น

(1) $D_{21(t)} = -7702.57-0.3919\ D_{21(t-1)}+0.0174\ Y_{1(t)}$

t-test (-1.8392) (-0.7453) (2.7481)

R^2 = 97.03 % t(5,0.5 %) = 2.571

(2) $D_{21(t)} = -59411.9-0.3802\ D_{21(t-1)}+0.0123\ Y_{1(t)}+515.873\ N_{1(t)}$

t-test (-0.5311) (-0.6474) (0.9136) (0.4627)

R^2 = 97.23 % t(4,0.5 %) = 2.776

(3) $D_{21(t)} = -44791.3-0.4314\ D_{21(t-1)}+0.014\ Y_{1(t)}+364.91\ N_{1(t)}+0.741\ P_{21(t)}$

t-test (-0.223) (-0.488) (0.555) (0.179) (0.0993)

R^2 = 97.24 % t(3,0.5 %) = 3.182

(4) $D_{2(t)} = -3899.4-0.504\ D_{21(t-1)}+0.0135\ Y_{1(t)}+1.733\ P_{21(t)}$

t-test (-1.623) (-0.779) (2.228) (0.4232)

R^2 = 97.20 % t(4,0.5 %) = 2.776

(5) $D_{21(t)} = 140086 - 0.0537\ D_{21(t-1)} + 1345.12\ N_{1(t)}$

t-test (-2.0833) (-0.1176) (2.1213)

R^2 = 96.46 % t(5,0.5 %) = 2.571

(6) $D_{21(t)} = 2907.16 + 0.9154\ D_{21(t-1)} - 1.1869\ P_{21(t)}$

t-test (1.4578) (5.8822) (-0.2167)

R^2 = 92.56 % t(5,0.5%) = 2.571

(7) $D_{21(t)} = -145818 - 0.0568\ D_{21(t-1)} + 1406.27\ N_{1(t)} - 2.4389\ P_{21(t)}$

t-test (-1.9642) (-0.1139) (2.0038) (-0.5832)

R^2 = 96.82 % t(4,0.5 %) = 2.776

(8) $D_{21(t)} = -4726.69 + 0.0122\ Y_{1(t)}$

t-test (-3.9176) (11.9493)

R^2 = 96.62 % t(6,0.5 %) = 2.447

(9) $D_{21(t)} = -59661.7 + 0.0069\ Y_{1(t)} + 547.108\ N_{1(t)}$

t-test (-0.5769) (0.7082) (0.5312)

R^2 = 96.84 % t(5,0.5 %) = 2.571

(10) $D_{21(t)} = -4813.02+0.0121\ Y_{1(t)}+0.4293\ P_{21(t)}$

t-test (-3.158) (9.0134) (0.1209)

R^2 = 96.63 % $t(5,0.5\ \%) = 2.571$

(11) $D_{21(t)} = -36930.2+0.0046\ Y_{1(t)}+321.45\ N_{1(t)}-1.3845\ P_{21(t)}$

t-test (-0.5547) (0.3253) (0.5240) (-0.2646)

R^2 = 96.91 % $t(4,0.5\ \%) = 2.776$

(12) $D_{21(t)} = -132339+1271.92\ N_{1(t)}$

t-test (-10.8753) (11.6441)

R^2 = 96.44 % $t(5,0.5\ \%) = 2.447$

(13) $D_{21(t)} = 1797.70+17.40\ P_{21(t)}$

t-test (0.3259) (1.4001)

R^2 = 28.16 % $t(6,0.5\ \%) = 2.447$

(14) $D_{21(t)} = -137601+1328.61\ Y_{1(t)}-2.4338\ P_{21(t)}$

t-test (-9.1133) (9.2667) (-0.6705)

R^2 = 96.80 % $t(5,0.5\ \%) = 2.571$

(15) $D_{21(t)} = -3023.67-0.387\ D_{21(t-1)}+0.0122\ Y_{1(t)}+36.84\ F_{1(t)}$

t-test (-1.963) (-0.756) (1.4646) (1.1043)

R^2 = 97.89 % $t(4,0.5\ \%) = 2.776$

(16) $D_{21(t)} = 407022-0.464\ D_{21(t-1)}+0.034\ Y_{1(t)}-4152.28\ N_{1(t)}$

$+170.46\ F_{1(t)}$

t-test (2.2262) (-1.393) (3.084) (-2.270) (2.7189)

R^2 = 99.41 % $t(3,0.5\ \%) = 3.182$

(17) $D_{21(t)} = -6471.58-0.226\ D_{21(t-1)}+0.008\ Y_{1(t)}-2.46\ P_{21(t)}$

$+53.75\ F_{1(t)}$

t-test (-1.046) (-0.3119) (0.5846) (-0.4001) (0.9311)

R^2 = 98.04 % $t(3,0.5\ \%) = 3.182$

(18) $D_{21(t)} = 309177-0.4213\ D_{21(t-1)}+0.033\ Y_{1(t)}-4069.86\ N_{1(t)}$

$-0.623\ P_{2(t)}+172.09\ F_{1(t)}$

t-test (1.5134) (-0.7359) (1.698) (-1.538) (-0.127)(1.9363)

R^2 = 99.42 % $t(2,0.5\ \%) = 4.303$

(19) $D_{21(t)} = -82431.3+0.034\ D_{21(t-1)}+774.98\ N_{1(t)}+30.35\ F_{1(t)}$

t-test (-0.4635) (0.0599) (0.4443) (0.3586)

R^2 = 96.69 % $t(4,0.5\ \%) = 2.776$

(20) $D_{21(t)} = -3335.78+0.1435\ D_{21(t-1)}-5.0292\ P_{21(t)}+80.5509\ F_{1(t)}$

t-test (-1.2260) (0.4581) (-1.3213) (2.5987)

R^2 = 97.71 % t(4,0.5 %) = 2.776

(21) $D_{21(t)} = 32256.2+0.2217\ D_{21(t-1)}-349.02\ N_{1(t)}-5.5306\ D_{21(t)}$
$+97.58\ F_{1(t)}$

t-test (0.1523) (0.2695) (-0.1686) (-1.0054) (0.9056)

R^2 = 97.74 % t(3,0.5 %) = 3.182

(22) $D_{21(t)} = -5086.69+0.0071\ Y_{1(t)}+37.055\ F_{1(t)}$

t-test (-4.2298) (1.5556) (1.1756)

R^2 = 97.49 % t(5,0.5 %) = 2.571

(23) $D_{21(t)} = 384595 +0.0266\ Y_{1(t)}-3893.04\ N_{1(t)}+162.38\ F_{1(t)}$

t-test (1.3429) (2.4037) (-1.8673) (2.2699)

R^2 = 99.84 % t(4,0.5 %) = 2.776

(24) $D_{21(t)} = -4611.81+0.0044\ Y_{1(t)}-3.526\ P_{21(t)}+61.15\ F_{1(t)}$

t-test (-3.3413) (0.7641) (-0.824) (1.3897)

R^2 = 97.95 % t(4,0.5 %) = 2.776

(25) $D_{21(t)} = 359420+0.323\ Y_{1(t)}-3637.80\ N_{1(t)}-2.7056\ P_{21(t)}+172.66\ F_{1(t)}$

t-test (1.5658) (1.340) (-1.6061) (-0.7726) (2.2123)

R^2 = 99.10 % t(3,0.5 %) = 3.182

(26) $D_{21(t)} = -90596.4+853.96\ N_{1(t)}+28.13\ F_{1(t)}$

t-test (-0.915) (0.8627) (0.4253)

R^2 = 96.60 % t(5,0.5 %) = 2.571

(27) $D_{21(t)} = -4396.65-5.3764\ P_{21(t)}+94.02\ F_{1(t)}$

t-test (-3.438) (-1.6091) (10.6436)

R^2 = 97.55 % t(5,0.5 %) = 2.571

(28) $D_{21(t)} = -28621.4+241.47\ N_{1(t)}-4.399\ P_{21(t)}+77.16\ F_{1(t)}$

t-test (-0.257) (0.217) (-1.1102) (0.9803)

R^2 = 97.59 % t(4,0.5%) = 2.776

๒.๖ ประเทศอิตาลี

(1) $D_{24(t)} = -2832.16+0.395\ D_{24(t-1)}+0.003\ Y_{4(t)}$

t-test (-1.081) (0.4901) (1.4512)

R^2 = 76.22 % $t(4,0.5\ \%) = 2.776$

(2) $D_{24(t)} = 335018-0.292\ D_{24(t-1)}+0.012\ Y_{2(t)}-6343.77\ N_{4(t)}$

t-test (2.1361) (-0.4399) (2.730) (-2.154)

R^2 = 90.66 % $t(3,0.5\ \%) = 3.182$

(3) $D_{24(t)} = 336349-0.309\ D_{24(t-1)}+0.0124\ Y_{4(t)}-6371.17\ N_{4(t)}-0.76\ P_{24(t)}$

t-test (1.732) (-0.345) (1.357) (-1.744) (-0.046)

R^2 = 90.67 % $t(2,0.5\ \%) = 4.303$

(4) $D_{24(t)} = -2169.45+0.47\ D_{24(t-1)}+0.002\ Y_{4}+3.948\ P_{24(t)}$

t-test (-0.466) (0.466) (0.1853) (0.1867)

R^2 = 76.49 % $t(3,0.5\ \%) = 3.182$

(5) $D_{24(t)} = -63230.3+1.006\ D_{24(t-1)}+1161.28\ N_{4(t)}$

t-test (-0.679) (1.340) (0.6804)

R^2 = 67.47 % t(4,0.5 %) = 2.776

(6) $D_{24(t)} = -1414.54+0.534\ D_{24(t-1)}+7.699\ P_{24(t)}$

t-test (-0.7236) (0.8362) (1.4515)

R^2 = 76.22 % t(4,0.5 %) = 2.776

(7) $D_{24(t)} = 161303+0.573\ D_{24(t-1)}-3017.57\ N_{4(t)}+17.32\ P_{24(t)}$

t-test = (0.983) (0.8192) (-0.9913) (1.5652)

R^2 = 82.09 % t(3,0.5 %) = 3.182

(8) $D_{24(t)} = -3307.14+0.0041\ Y_{4(t)}$

t-test (-1.476) (3.8516)

R^2 = 74.79 % t(5,0.5 %) = 2.571

(9) $D_{24(t)} = 302177+0.0107\ Y_{4(t)}-5722.05\ N_{4(t)}$

t-test (2.4515) (8.[illegible]04) (-2.479)

R^2 = 90.05 % t(4,0.5 %) = 2.776

(10) $D_{24(t)} = -3305.95+0.0041\ Y_{4(t)}+0.0082\ P_{24(t)}$

t-test (-0.9308) (0.6574) (0.0005)

R^2 = 74.79 % t(4,0.5 %) = 2.776

(11) $D_{24(t)} = 303553+0.0101\ Y_{4(t)}-5743.32\ N_{4(t)}+1.6563\ P_{24(t)}$

t-test (2.1335) (1.9115) (-2.157) (0.1316)

R^2 = 90.12 % t(3,0.5 %) = 3.182

(12) $D_{24(t)} = -155337+2877\ N_{4(t)}$

t-test (-2.2952) (2.3679)

R^2 = 52.36 % t(5,0.5 %) = 2.571

(13) $D_{24(t)} = -1381.86+11.223\ P_{24(t)}$

t-test (-0.729) (3.592)

R^2 = 72.07 % t(5,0.5 %) = 2.571

(14) $D_{24(t)} = 163371-3055.32\ N_{4(t)}+20.92\ P_{24(t)}$

t-test (1.0389) (-1.0478) (2.1456)

R^2 = 78.08 % t(4,0.5 %) = 2.776

(15) $D_{24(t)} = -3746.17+0.7575\ D_{24(t-1)}-0.0114\ Y_{4(t)}+160.15\ F_{4(t)}$

t-test (-1.119) (0.6801) (-0.4204) (0.5396)

R^2 = 78.08 % $t(4,0.5\ \%) = 2.776$

(16) $D_{24(t)} = 321778-0.0769\ D_{24(t-1)}+0.004\ Y_{4(t)}-6104.12\ N_{4(t)}+$
$83.59\ F_{4(t)}$

t-test (1.6934) (-0.0773) (0.1778) (-1.7133) (0.3547)

R^2 = 91.22 % $t(3,0.5\ \%) = 3.182$

(17) $D_{24(t)} = 1621.32+1.5103\ D_{24(t-1)}-0.0348\ Y_{4(t)}+13.663\ P_{24(t)}$
$+335.20\ F_{4(t)}$

t-test = (-0.319) (0.875) (0.7256) (0.6302) (0.7744)

R^2 = 81.92 % $t(3,0.5\ \%) = 3.182$

(18) $D_{24(t)} = 301004+0.2268\ D_{24(t-1)}-0.005\ Y_{4(t)}-5701.36\ N_{4(t)}$
$+6.17\ P_{24(t)}+146.46\ F_{4(t)}$

t-test (1.0622) (0.1103) (-0.0852) (-1.068) (0.1994) (0.3225)

R^2 = 91.55 % $t(2,0.5\ \%) = 4.303$

(19) $D_{24(t)} = 308218+0.0516\ D_{24(t-1)}-5853.42\ N_{4(t)}+124.59\ F_{4(t)}$

t-test (2.1497) (0.0913) (-2.1717) (2.8173)

R^2 = 91.80 % t(3,0.5 %) = 3.182

(20) $D_{24(t)} = -2746.21+0.4609\ D_{24(t)}+2.0515\ P_{24(t)}+27.19\ F_{4(t)}$

t-test (-0.623) (0.533) (0.119) (0.3496)

R^2 = 77.15 % t(3,0.5 %) = 3.182

(21) $D_{24(t)} = 313452+0.0718\ D_{24(t-1)}-5937.95\ N_{4(t)}+4.037\ P_{24(t)}$

$+108.80\ F_{4(t)}$

t-test (1.8193) (0.1056) (-1.836) (0.3123) (1.4864)

R^2 = 91.49 % t(2,0.5 %) = 4.303

(22) $D_{24(t)} = -3630.40+0.0008\ Y_{4(t)}+38.33\ F_{4(t)}$

t-test (-1.1671) (0.0422) (0.1741)

R^2 = 74.98 % t(4,0.5%) = 2.776

(23) $D_{24(t)} = 314585+0.0028\ Y_{4(t)}-5969.41\ N_{4(t)}+94.68\ F_{4(t)}$

t-test (2.322) (0.2175) (-2.3493) (0.6199)

R^2 = 91.19 % t(3,0.5 %) = 3.182

(24) $D_{24(t)} = -3542.23+0.0003\ Y_{4(t)}+0.7318\ P_{24(t)}+40.45\ F_{4(t)}$

t-test (-0.8124) (0.0143) (0.0356) (0.1549)

R^2 = 74.99 % t(3,0.5 %) = 3.182

(25) $D_{24(t)} = 319080+0.0007\ Y_{4(t)}-6045.51\ N_{4(t)}+3.6382\ P_{24(t)}$
$+105.93\ F_{4(t)}$

t-test (1.940) (0.1375) (-1.9619) (0.2462) (0.5579)

R^2 = 91.45 % t(2,0.5 %) = 4.303

(26) $D_{24(t)} = 312375-5932.72\ N_{4(t)}+127.01\ F_{4(t)}$

t-test (2.6493) (-2.6809) (4.1316)

R^2 = 91.05 % t(4,0.5 %) = 2.776

(27) $D_{24(t)} = -3549.43+0.8763\ P_{24(t)}+44.04\ F_{4(t)}$

t-test (-0.9463) (0.0566) (0.6837)

R^2 = 74.99 % t(4,0.5 %) = 2.776

(28) $D_{24(t)} = 319012-6044.50\ N_{4(t)} +3.9078\ P_{24(t)}+112.63\ F_{4(t)}$

t-test (2.375) (-2.4017) (0.3708) (2.1642)

R^2 = 91.44 % $t(3,0.5\ \%) = 3.182$

๒.๓ ประเทศฮ่องกง

(1) $D_{23(t)} = 34.22-0.3036\ D_{23(t-1)}+0.0878\ Y_{3(t)}$

t-test (0.1638) (-1.1716) (3.7046)

R^2 = 73.76 % $t(5,0.5\ \%) = 2.571$

(2) $D_{23(t)} = 4132.93-0.3393\ D_{23(t-1)}+0.1556\ Y_{3(t)}-1081.97\ N_{3(t)}$

t-test (0.7674) (-1.23.49) (1.6850) (-0.7616)

R^2 = 77.08 % $t(4,0.5\ \%) = 2.776$

(3) $D_{23(t)} = 1066.22-0.191\ D_{23(t-1)}+0.1311\ Y_{3(t)}-252.13\ N_{3(t)}$
$-116.81\ P_{23(t)}$

t-test (0.1751) (-0.6226) (1.3895) (-0.1561) (-1.0418)

R^2 = 83.17 % $t(3,0.5\ \%) = 3.182$

(4) $D_{23(t)} = 116.78-0.1738\ D_{23(t-1)}+0.1173\ Y_{3(t)}-125.44\ P_{23(t)}$

t-test = (0.5959) (-0.6982) (4.0194) (-1.4788)

R^2 = 83.03 % $t(4,0.5\ \%) = 2.776$

(5) $D_{23(t)} = -4537.13-0.2075\ D_{23(t-1)}+1223.97\ N_{3(t)}$

t-test (-2.4377) (-0.6738) (2.7457)

R^2 = 60.82 % t(5,0.5 %) = 2.571

(6) $D_{23(t)} = 328.11-0.1042\ D_{23(t-1)}+107.51\ P_{23(t)}$

t-test (0.8657) (-0.2089) (0.8645)

R^2 = 14.51 % t(5,0.5 %) = 2.571

(7) $D_{23(t)} = -6804.55-0.0377\ D_{23(t-1)}+1845.94\ N_{3(t)}-155.64\ P_{23(t)}$

t-test (-2.7456) (-0.1185) (2.8918) (-1.2905)

R^2 = 72.34 % t(4,0.5 %) = 2.776

(8) $D_{23(t)} = 43.33+0.0752\ Y_{3(t)}$

t-test (-0.2121) (3.4554)

R^2 = 66.55 % t(6,0.5 %) = 2.447

(9) $D_{23(t)} = 2914.53+0.1231\ Y_{3(t)}-782.55\ N_{3(t)}$

t-test (0.5236) (1.3234) (-0.5318)

R^2 = 68.35 % t(5,0.5 %) = 2.571

(10) $D_{23(t)} = 91.64+0.1159\ Y_{3(t)}-146.32\ P_{23(t)}$

t-test (0.5022) (4.2016) (-1.9457)

R^2 = 80.97 % t(5,0.5 %) = 2.571

(11) $D_{23(t)} = 322.15+0.1099\ Y_{3(t)}+110.17\ N_{3(t)}-149.19\ P_{23(t)}$

t-test (-0.0617) (1.3574) (0.0794) (-1.6318)

R^2 = 81.00 % t(4,0.5 %) = 2.776

(12) $D_{23(t)} = -4144.68+1103.19\ N_{3(t)}$

t-test (-2.4592) (2.8351)

R^2 = 57.26 % t(6,0.5 %) = 2.447

(13) $D_{23(t)} = 311.43+93.24\ P_{23(t)}$

t-test (0.9168) (0.9786)

R^2 = 13.76 % t(6,0.5 %) = 2.447

(14) $D_{23(t)} = -6831.69+1851.41\ N_{3(t)}-161.56\ P_{23(t)}$

t-test (-3.0899) (3.2456) (-1.6429)

R^2 = 72.24 % t(5,0.5 %) = 2.571

(15) $D_{23(t)}$ = -180.17-0.3212 $D_{23(t-1)}$+0.0884 $Y_{3(t)}$+1.8384 $F_{3(t)}$

t-test (-0.3833) (-1.1375) (3.4429) (0.5211)

R^2 = 75.43 % t(4,0.5 %) = 2.776

(16) $D_{23(t)}$ =4556.06-0.3684 $D_{23(t-1)}$+0.1679 $Y_{3(t)}$-1267.60 $N_{3(t)}$+

2.4019 $F_{3(t)}$

t-test (0.7759) (-1.2237) (1.6486) (-0.8095) (0.6396)

R^2 = 79.83 % t(3,0.5 %) = 3.182

(17) $D_{23(t)}$ = 477.89-0.0871 $D_{23(t-1)}$+0.1302 $Y_{3(t)}$-183.60 $P_{23(t)}$-

2.7684 $F_{3(t)}$

t-test (0.7422) (-0.2822) (3.3809) (-1.3628) (-0.5946)

R^2 = 84.82 % t(3,0.5 %) = 3.182

(18) $D_{23(t)}$ = -10727.4+0.422 $D_{23(t-1)}$-0.007 $Y_{3(t)}$+3289.66 $N_{3(t)}$-

486.63 $P_{23(t)}$-11.83 $F_{3(t)}$

t-test (-0.8192) (0.6230) (-0.044) (0.8568) (-1.2779) (-1.0157)

R^2 = 88.90 % t(2,0.5 %) = 4.303

(19) $D_{23(t)} = -4672.75-0.2171\ D_{23(t-1)}+1222.67\ N_{3(t)}+1.2278\ F_{3(t)}$

t-test (-2.2064) (-0.6333) (2.4768) (0.2785)

R^2 = 61.56 % t(4,0.5 %) = 2.776

(20) $D_{23(t)} = -512.47-0.3105\ D_{23(t-1)}+179.01\ P_{23(t)}+6.0562\ F_{3(t)}$

t-test (-0.4705) (-0.5425) (1.1559) (0.8270)

R^2 = 26.99 % t(4,0.5 %) = 2.776

(21) $D_{23(t)} = -10162.6+0.3972\ D_{23(t-1)}+3124.81\ N_{3(t)}-472.66\ P_{23(t)}-11.41\ F_{3(t)}$

t-test (4.2145) (1.2788) (4.0875) (-2.716) (-2.1135)

R^2 = 88.89 % t(3,0.5 %) = 3.182

(22) $D_{23(t)} = -204.99+0.0751\ Y_{3(t)}+1.3577\ F_{3(t)}$

t-test (-0.4248) (3.1930 (0.3767)

R^2 = 67.48 % t(5,0.5 %) =2.571

(23) $D_{23(t)} = 3140.72+0.1299\ Y_{3(t)}-896.14\ N_{3(t)}+1.7061\ F_{3(t)}$

t-test (0.5145) (1.2631) (-0.5501) (0.4334)

R^2 = 69.77 % t(4,0.5 %) = 2.776

(24) $D_{23(t)} = 549.16+0.1325\ Y_{3(t)}-204.78\ P_{23(t)}-3.3891\ F_{3(t)}$

t-test (1.0565) (4.0153) (-2.0856) (-0.9416)

R^2 = 84.42 % $t(4,0.5\ \%) = 2.776$

(25) $D_{23(t)} = -3638.45+0.0781\ Y_{3(t)}+1185.34\ N_{3(t)}-269.36\ P_{23(t)}-5.347\ F_{3(t)}$

t-test (-0.6261) (0.9402) (0.7234) (-1.959) (-1.1395)

R^2 = 86.74 % $t(3,0.5\ \%) = 3.182$

(26) $D_{23(t)} = -4235.45+1097.89\ N_{3(t)}+0.9484\ F_{3(t)}$

t-test (-2.2549) (2.5855) (0.2304)

R^2 = 57.71 % $t(5,0.5\ \%) = 2.571$

(27) $D_{23(t)} = -312.33+124.10\ P_{23(t)}+4.3242\ F_{3(t)}$

t-test (-0.3289) (1.1424) (0.7079)

R^2 = 21.62 % $t(5,0.5\ \%) = 2.571$

(28) $D_{23(t)} = -8656.01+2579.85\ N_{3(t)}-310.59\ P_{23(t)}-6.8363\ F_{3(t)}$

t-test (-3.8218) (3.7760) (-2.4191) (-1.5704)

R^2 = 82.83 % t(4,0.5 %) = 2.776

๓. ปลาสดแช่แข็ง

๓.๑ ประเทศมาเลเซีย

(1) $D_{35(t)} = 1484.97+0.1603\ D_{35(t-1)}+11.8259\ Y_{5(t)}$

t-test (0.1877) (0.2587) (1.635)

R^2 = 77.87 % t(4,0.5 %) = 2.776

(2) $D_{35(t)} = -57761.00+0.0242\ D_{35(t-1)}+4.1799\ Y_{5(t)}+6500.59\ N_{5(t)}$

t-test (-3.3534) (0.0304) (0.1850) (0.3630)

R^2 = 78.80 % t(3,0.5 %) = 3.182

(3) $D_{35(t)} = -45310+0.0656\ D_{35(t-1)}+4.364\ Y_{5(t)}+5100.74\ N_{5(t)}+$
$9007.53\ P_{35(t)}$

t-test (-0.1916) (0.0619) (0.1577) (0.1954) (0.0983)

R^2 = 78.90 % t(2,0.5 %) = 4.303

(4) $D_{35(t)} = 844.51+0.1854\ D_{35(t-1)}+8.7764\ Y_{5(t)}+18782\ P_{35(t)}$

t-test (0.0913) (0.2614) (0.6663) (0.2966)

R^2 = 78.50 % t(3,0.5 %) = 3.182

(5) $D_{35(t)} = -85844.1+0.0003\ D_{35(t-1)}+9589.07\ N_{5(t)}$

t-test (-1.6261) (0.0004) (1.6992)

R^2 = 78.56 % t(4,0.5 %) = 2.776

(6) $D_{35(t)} = 128.96+0.4843\ D_{35(t-1)}+51717.7\ P_{35(t)}$

t-test (0.0151) (0.9479) (1.4082)

R^2 = 75.32 % t(4,0.5 %) = 2.776

(7) $D_{35(t)} = -75848.1+0.0362\ D_{35(t-1)}+8462.53\ N_{5(t)}+8028.64\ P_{35(t)}$

t-test (-0.6796) (0.0423) (0.6831) (0.1068)

R^2 = 78.64 % t(3,0.5 %) = 3.182

(8) $D_{35(t)} = 2279.83+13.45\ Y_{5(t)}$

t-test (0.3468) (4.1501)

R^2 = 77.50 % t(5,0.5 %) = 2.571

(9) $D_{35(t)} = -60016.00+4.0676\ Y_{5(t)}+6758.27\ N_{5(t)}$

t-test (-0.4754) (0.2107) (0.49.42)

R^2 = 78.80 % $t(4,0.5\ \%) = 2.776$

(10) $D_{35(t)} = 1817.99+10.9481\ Y_{5(t)}+16811.9\ P_{35(t)}$

t-test (0.2450) (1.2242) (0.3053)

R^2 = 78.01 % $t(4,0.5\ \%) = 2.776$

(11) $D_{35(t)} = -53573.8+4.0617\ Y_{5(t)}+6039.26\ N_{5(t)}+6746.70\ P_{35(t)}$

t-test (-0.3356) (0.1825) (0.3473) (0.0981)

R^2 = 78.86 % $t(3,0.5\ \%) = 3.182$

(12) $D_{35(t)} = -85859.9+9590.92\ N_{5(t)}$

t-test (-3.1992) (4.2804)

R^2 = 78.56 % $t(5,0.5\ \%) = 2.571$

(13) $D_{35(t)} = 3590.38+78577.4\ P_{35(t)}$

t-test (0.4704) (3.3975)

R^2 = 69.78 % $t(5,0.5\ \%) = 2.571$

(14) $D_{35(t)} = -79348.3+8864.25\ N_{5(t)}+6780.28\ P_{35(t)}$

t-test (0.5393) (0.2818) (1.4183) (-0.5741)

R^2 = 80.06 % $t(3,0.5\ \%) = 3.182$

(15) $D_{35(t)} = 6932.82+0.1920\ D_{35(t-1)}+16.97\ Y_{5(t)}-109.30\ F_{5(t)}$

t-test (0.5393) (0.2818) (1.483) (-0.5741)

R^2 = 80.06 % $t(3,0.5\ \%) = 3.182$

(16) $D_{35(t)} = -117320-0.031\ D_{35(t-1)}+3.7993\ Y_{5(t)}+14018.6\ N_{5(t)}-179.77\ F_{5(t)}$

t-test (-0.606) (-0.093) (0.1556) (0.644) (-0.7527)

R^2 = 83.48 % $t(2,0.5\ \%) = 4.303$

(17) $D_{35(t)} = 6468.13+0.1964\ D_{35(t-1)}+15.93\ Y_{5(t)}+4606.52\ P_{35(t)}-103.14\ F_{5(t)}$

t-test (0.3633) (0.2345) (0.6724) (0.056) (-0.3998)

R^2 = 80.09 % $t(2,0.5\ \%) = 4.303$

(18) $D_{35(t)} = -749733-1.79\ D_{35(t-1)}-3.47\ Y_{5(t)}+88537.9\ N_{5(t)}-278344\ P_{35(t)}-927.31\ F_{5(t)}$

t-test (-9.677) (-7.577) (-0.88) (9.767) (-8.886) (-10.06)

R^2 = 99.79 % $t(1,0.5\ \%) = 12.706$

(19) $D_{35(t)} = -143089-0.1032\ D_{35(t-1)}+16856.8\ N_{5(t)}-180.54\ F_{5(t)}$

t-test (-1.7396) (-0.1464) (1.7254) (-0.9205)

R^2 = 83.28 % $t(3,0.5\ \%) = 3.182$

(20) $D_{35(t)} = -1235.75+0.4154\ D_{35(t-1)}+48284.6\ P_{35(t)}+27.93\ F_{5(t)}$

t-test (-0.1003) (0.5939) (1.0458) (0.1827)

R^2 = 75.59 % $t(3,0.5\ \%) = 3.182$

(21) $D_{35(t)} = -714260-1.7415\ D_{35(t-1)}+84531.4\ N_{5(t)}-272644\ P_{35(t)}$

$-911.33\ F_{5(t)}$

t-test (-11.48) (-8.09) (11.46) (-9.453) (-10.7105)

R^2 = 99.63 % t(2,0.5 %) = 4.303

(22) $D_{35(t)} = 7661.81+18.70\ Y_{5(t)}-104.95\ F_{5(t)}$

t-test (0.6935) (2.0739) (-0.6303)

R^2 = 79.53 % t(4,0.5 %) = 2.776

(23) $D_{35(t)} = -108792+4.1728\ Y_{5(t)}+13030\ N_{5(t)}-176.20\ F_{5(t)}$

t-test (-0.7795) (0.2116) (0.8373) (-0.9135)

R^2 = 83.41 % t(3,0.5 %) = 3.182

(24) $D_{35(t)} = 7389.90+18.09\ Y_{5(t)}+2794.84\ P_{35(t)}-101.14\ F_{5(t)}$

t-test (0.5142) (1.0014) (0.0411) (-0.4739)

R^2 = 79.55 % t(3,0.5 %) = 3.182

(25) $D_{35(t)} = -246892+4.3691\ Y_{4(t)}+29408.3\ N_{5(t)}-85083.7\ P_{35(t)}-$

$381.59\ F_{5(t)}$

t-test (-1.1426) (0.2121) (1.1791) (-0.8658) (-1.2261

R^2 = 87.93 % $t(2,0.5\ \%) = 4.303$

(26) $D_{35(t)} = -135237+15927.4\ N_{5(t)}-175.96\ F_{5(t)}$

t-test (-2.4954) (2.4678) (-1.0456)

R^2 = 83.16 % $t(4,0.5\ \%) = 2.776$

(27) $D_{35(t)} = -274206+32397.4\ N_{5(t)}-84854.3\ P_{35(t)}-380.79\ F_{5(t)}$

t-test (-1.9140) (1.9068) (-1.0459) (-1.4819)

R^2 = 87.66 % $t(3,0.5\ \%) = 3.182$

๓.๒ ประเทศญี่ปุ่น

(1) $D_{31(t)} = -344.02+0.1657\ D_{31(t-1)}+0.0020\ Y_{1(t)}$

t-test (-1.1433) (1.1698) (3.7354)

R^2 = 78.18 % t(4,0.5 %) = 2.776

(2) $D_{31(t)} = -84561.6+0.2691\ D_{31(t)}-0.0059\ Y_{1(t)}+832.44\ N_{1(t)}$

t-test (-1.6199) (1.9754) (-1.1928) (1.6038)

R^2 = 88.25 % t(3,0.5 %) = 3.182

(3) $D_{31(t)} = -54155.2-0.3089\ D_{31(t-1)}-0.003\ Y_{1(t)}+560.65\ N_{1(t)}-8.486\ P_{31(t)}$

t-test (-5.8949) (-5.1026) (-3.3749) (6.1997) (-10.297)

R^2 = 99.79 % t(2,0.5 %) = 4.303

(4) $D_{31(t)} = 2769-0.4743\ D_{31(t-1)}+0.003\ Y_{1(t)}-9.9772\ P_{31(t)}$

t-test (2.4820) (-2.3762) (7.9878) (-3.4477)

R^2 = 95.60 % t(3,0.5 %) = 3.182

(5) $D_{31(t)} = -22625.3+0.1945\ D_{31(t-1)} +215.97\ N_{1(t)}$

t-test (-4.0187) (1.5284) (4.3151)

R^2 = 82.68 % t(4,0.5 %) = 2.776

(6) $D_{31(t)} = 1757.09+0.0672\ D_{31(t-1)} -0.2869\ P_{31(t)}$

t-test (0.3879) (0.0875) (-0.0267)

R^2 = 2.08 % t(4,0.5 %) = 2.776

(7) $D_{31(t)} = -23306.5=0.4045\ D_{31(t-1)} +256.93\ N_{1(t)} -9.400\ P_{31(t)}$

t-test (-12.3422) (-3.5772) (14.1010) (-5.718)

R^2 = 98.54 % t(3,0.5 %) = 3.182

(8) $D_{31(t)} = -392.99+0.0019\ Y_{1(t)}$

t-test (-0.6025) (3.4747)

R^2 = 70.72 % t(5,0.5 %) = 2.571

(9) $D_{31(t)} = -35180-0.0014\ Y_{1(t)} +347.07\ N_{1(t)}$

t-test (-0.5844) (-0.2447) (0.5779)

R^2 = 72.97 % t(4,0.5 %) = 2.776

(10) $D_{31(t)} = 278.77+0.0022\ Y_{1(t)} -3.583\ P_{31(t)}$

t-test (0.4957) (5.1928) (-2.2897)

R^2 = 87.33 % $t(4,0.5\ \%) = 2.776$

(11) $D_{31(t)} = -76092.6-0.0051\ Y_{1(t)}+763.83\ N_{1(t)}-4.5874\ P_{31(t)}$

t-test (-3.0659) (-2.1309) (3.0774) (-4.3575)

R^2 = 96.95 % $t(3,0.5\ \%) = 3.182$

(12) $D_{31(t)} = -20542.9+200.86\ N_{1(t)}$

t-test (-3.3407) (3.6368)

R^2 = 72.57 % $t(5,0.5\ \%) = 2.571$

(13) $D_{31(t)} = 2139.25-1.1536\ P_{31(t)}$

t-test (1.9832) (-0.3105)

R^2 = 1.89 % $t(5,0.5\ \%) = 2.571$

(14) $D_{31(t)} = -23526.3+237.65\ N_{1(t)}-3.9527\ P_{31(t)}$

t-test (-6.2726) (6.8708) (-3.2122)

R^2 = 92.34 % $t(4,0.5\ \%) = 2.776$

(15) $D_{31(t)} = -1164.98+0.2234\ D_{31(t-1)}-0.0003\ Y_{1(t)}+16.85\ F_{1(t)}$

t-test (-1.3774) (1.3929) (-0.1134) (0.8718)

R^2 = 82.59 % $t(3,0.5\ \%) = 3.182$

(16) $D_{31(t)} = -168199+0.2747\ D_{31(t-1)}-0.0099\ Y_{1(t)}+1669.51\ N_{1(t)}-28.70\ F_{1(t)}$

t-test (-1.3557) (1.8649) (-1.3170) (1.3464) (-0.7568)

R^2 = 90.87 % $t(2,0.5\ \%) = 4.303$

(17) $D_{31(t)} = 2386.61-0.4058\ D_{31(t-1)}+0.0004\ Y_{1(t)}-9.6995\ P_{31(t)}+14.80\ F_{1(t)}$

t-test (3.5573) (-3.3802) (0.5005) (-5.7026) (2.5921)

R^2 = 98.99 % $t(2,0.5\ \%) = 4.303$

(18) $D_{31(t)} = -58874.9-0.3021\ D_{31(t-1)}-0.003\ Y_{1(t)}+607.52\ N_{1(t)}-8.39\ P_{31(t)}-1.502\ F_{1(t)}$

t-test (-1.864) (-3.2013) (-1.6569) (1.9395) (-6.4893) (0.1635)

R^2 = 99.79 % $t(1,0.5\ \%) = 12.706$

(19) $D_{31(t)} = -13236.3+0.2047\ D_{31(t-1)}+121.47\ N_{1(t)}+6.4943\ F_{1(t)}$

t-test (-0.3016) (1.3356) (0.2757) (0.2163)

R^2 = 82.95 % t(3,0.5 %) = 3.182

(20) $D_{31(t)} = 2306.34-0.3884\ D_{31(t-1)}-9.5681P_{31(t)}+17.5824\ F_{1(t)}$

t-test (4.0879) (-3.9-19) (-6.5737) (15,9941)

R^2 = 98.86 % t(3.05%) = 3.182

(21) $D_{31(t)} = -8461.61-0.3974\ D_{31(t-1)}+108.04\ N_{1(t)}-9.543\ P_{31(t)} - 10.28\ F_{1(t)}$

t-test (-0.7284) (-3.8814) (0.9281) (-6.4021) (1.2919)

R^2 = 99.21 % t(2,0.5 %) = 4.303

(22) $D_{31(t)} = -448.63+0.0012\ Y_{1(t)}+5.7262\ F_{1(t)}$

t-test (-0.6012) (0.3991) (0.2928)

R^2 = 71.32 % t(4,0.5 %) = 2.776

(23) $D_{31(t)} = -107588-0.0049\ Y_{1(t)}+1071.91\ N_{1(t)}-25.16\ F_{1(t)}$

t-test (-0.6649) (-0.5111) (0.6622) (-0.4915)

R^2 = 74.99 % t(3,0.5 %) = 3.182

(24) $D_{31(t)} = 249.71-0.0004\ Y_{1(t)}-4.4149\ P_{31(t)}+19.05\ F_{1(t)}$

t-test (0.526) (-0.2343) (-3.1148) (1.6170)

R^2 = 93.23 % $t(3,0.5\ \%) = 3.182$

(25) $D_{31(t)} = -117202-0.007\ Y_{1(t)}+1175.21\ N_{1(t)}-4.492\ P_{31(t)}-14.58\ F_{1(t)}$

t-test (-1.9152) (-1.9189) (1.9193) (-4.3584) (-0.748)

R^2 = 97.62 % $t(2,0.5\ \%) = 4.303$

(26) $D_{31(t)} = -29132.7+287.04\ N_{1(t)}-5.873\ F_{1(t)}$

t-test (-0.6307) (0.6208) (-0.1880)

R^2 = 72.81 % $t(4,0.5\ \%) = 2.776$

(27) $D_{31(t)} = 238.378-4.3175\ P_{31(t)}+16.36\ F_{1(t)}$

t-test (0.5773) (-3.6461) (7.2742)

R^2 = 93.10 % $t(4,0.5\ \%) = 2.776$

(28) $D_{31(t)} = -6294.88+65.26\ N_{1(t)}-4.229\ P_{31(t)}+11.93\ F_{1(t)}$

t-test (-0.2275) (0.2361) (-3.0084) (0.6295)

R^2 = 93.23 % $t(3,0.5\ \%) = 3.182$

รูปแบบของสมการอุปสงค์ของสินค้าประเภท กุ้งทะเล, ปลาหมึก และปลาสดแช่แข็งส่งออกของไทยในประเทศญี่ปุ่น, สหรัฐฯ, ฮ่องกง, อิตาลี และมาเลเซีย ในรูปแบบจำลองที่ ๒ นี้ จะไม่นำมาใช้ในการวิเคราะห์หาแนวโน้มความต้องการใช้พื้นที่ห้องเย็นในอนาคต ทั้งนี้เนื่องจาก เครื่องหมายหน้าสัมประสิทธิ์การทดสอบต่าง ๆ ไม่เป็นไปตามหลักเกณฑ์ทางเศรษฐศาสตร์และเศรษฐมิติที่ได้วางไว้

ประวัติการศึกษา

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