

*

(-)

.

.

)

-

()

(

-

-

.

-

.

()

.

.

:

.

-

-

.

-

.

.

*

Email: tarahomi2007@yahoo.com

(

.

.

-

()

.

:

-

.

-

.

.

()

-

.

-

()

.

.

.

()

-

.

.

-
1. Leontief
 2. Rusmussen
 3. Hazari
 4. Diamond

()

()

()

-
1. B. Andreosso, O. Callaghan and Guo Qiang Yue
 2. Chenry and Watenab
 3. Dietzen Bacher and Vander linden
 4. Lortic Pagfar and Leverence Dolinar

$$\begin{matrix} X_i & i \\ \vdots & \end{matrix} \quad \begin{matrix} L_i \\ i \end{matrix} \quad \begin{matrix} \\ i \end{matrix}$$

$$e_i = \frac{L_i}{X_i} \quad i = 1, 2, \dots, n \quad ()$$

$$\begin{matrix} \cdot \\ \cdot \end{matrix} \quad \begin{matrix} i \\ n \times n \end{matrix} \quad \begin{matrix} e_i \\ \vdots \end{matrix}$$

$$e = \begin{bmatrix} e_1 & \circ & \dots & \circ \\ \circ & e_2 & \dots & \circ \\ \vdots & \vdots & & \vdots \\ \circ & \circ & \dots & e_n \end{bmatrix} \quad ()$$

$$\begin{matrix} \vdots \\ L = e(I - A)^{-1} \end{matrix} \quad ()$$

$$\begin{matrix} \cdot \\ \cdot \end{matrix} \quad \begin{matrix} (\quad) \\ (j \quad) \end{matrix} \quad \begin{matrix} \cdot \\ \cdot \end{matrix}$$

$$\begin{matrix} \vdots \\ (\quad) \end{matrix} \quad \begin{matrix} \cdot \\ j \end{matrix}$$

$$u_j = \frac{n \times}{\quad} \quad ()$$

$$\begin{matrix} \vdots \\ (\quad) \end{matrix} \quad \begin{matrix} \cdot \\ n \end{matrix}$$

$$u_i = \frac{n \times}{n} \quad (1)$$

$$(i) \quad n$$

$$U_j - U_i$$

:

$$V_j = \frac{\sqrt{\frac{1}{n-1} \sum_{i=1}^n (L_{ij} - \frac{1}{n} \sum_{i=1}^n L_{ij})^2}}{\frac{1}{n} \sum_{i=1}^n L_{ij}} \quad (2)$$

$$V_i = \frac{\sqrt{\frac{1}{n-1} \sum_{j=1}^n (L_{ij} - \frac{1}{n} \sum_{j=1}^n L_{ij})^2}}{\frac{1}{n} \sum_{j=1}^n L_{ij}} \quad (3)$$

$$V_i - V_j$$

$$V_j - V_i \quad U_j - U_i$$

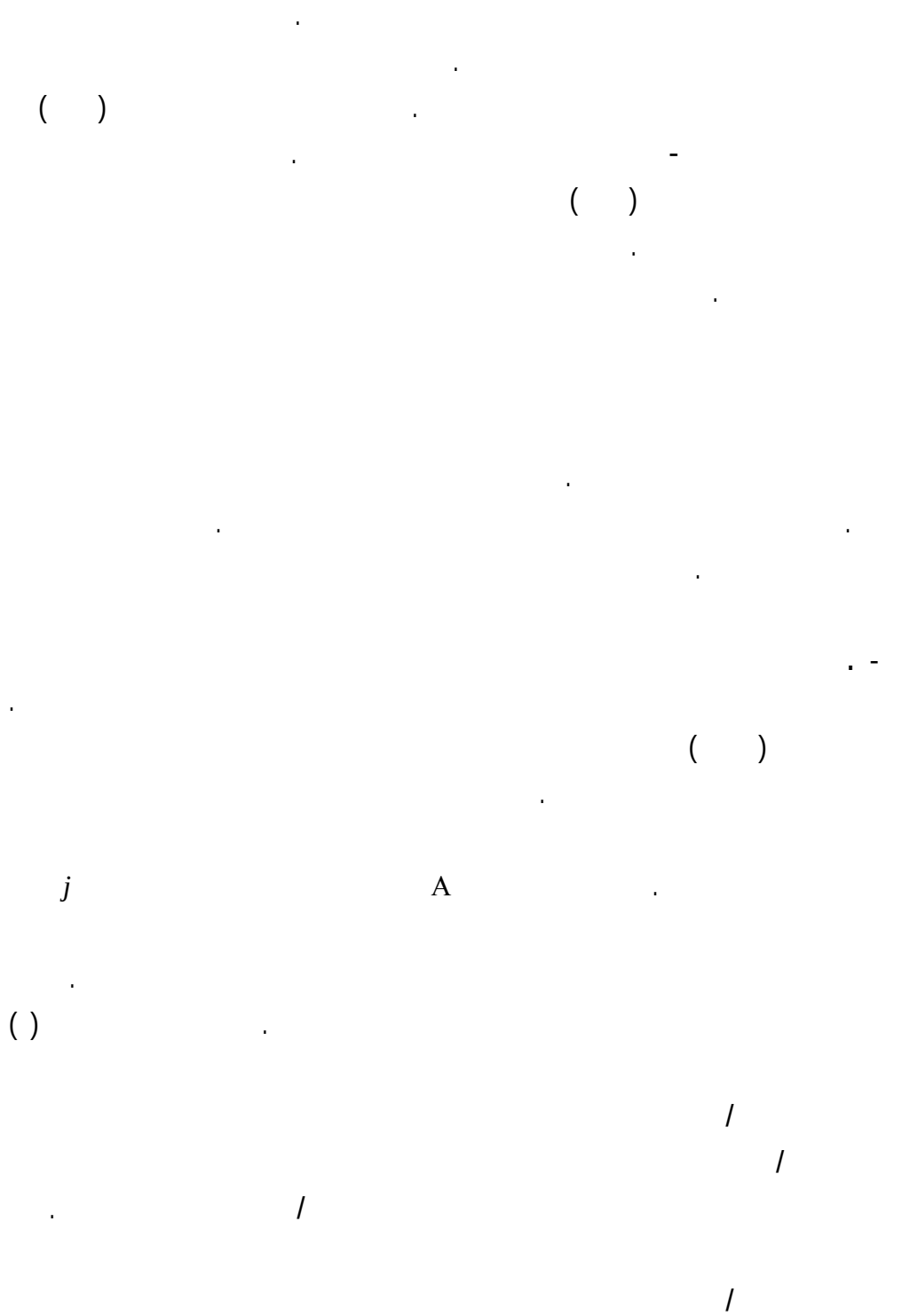
(HIOA)

-
-

$$\begin{aligned}
& \vdots \\
& E_j^e = \frac{\partial L}{\partial F_j} \times \frac{F_j}{L} \quad () \\
& \frac{\partial L}{\partial F_j} \quad j \quad F_j \quad L \\
& \quad j \\
& (j \quad)
\end{aligned}$$

$$\begin{aligned}
& (j \quad) \\
& \vdots \\
& E_j'^e = \frac{\partial L_j}{\partial F_j} \times \frac{F_j}{L_j} \quad () \\
& \frac{\partial L_j}{\partial F_j} \quad j \quad F_j \quad j \quad L_j \\
& \quad j
\end{aligned}$$

$$\begin{array}{ccccc} & & V_j & V_i & U_j & U_i \\ & & & & & \\ V_i & & V_j & & U_j & U_i \end{array}.$$
$$U_j - U_i \leq V_i$$
$$U_j - U_i$$
$$f(x) = \frac{1}{2}x^2 - \frac{1}{3}x^3 + \frac{1}{4}x^4 - \frac{1}{5}x^5 + \frac{1}{6}x^6 - \frac{1}{7}x^7 + \frac{1}{8}x^8 - \frac{1}{9}x^9 + \frac{1}{10}x^{10} - \frac{1}{11}x^{11} + \frac{1}{12}x^{12} - \frac{1}{13}x^{13} + \frac{1}{14}x^{14} - \frac{1}{15}x^{15} + \frac{1}{16}x^{16} - \frac{1}{17}x^{17} + \frac{1}{18}x^{18} - \frac{1}{19}x^{19} + \frac{1}{20}x^{20} - \frac{1}{21}x^{21} + \frac{1}{22}x^{22} - \frac{1}{23}x^{23} + \frac{1}{24}x^{24} - \frac{1}{25}x^{25} + \frac{1}{26}x^{26} - \frac{1}{27}x^{27} + \frac{1}{28}x^{28} - \frac{1}{29}x^{29} + \frac{1}{30}x^{30} - \frac{1}{31}x^{31} + \frac{1}{32}x^{32} - \frac{1}{33}x^{33} + \frac{1}{34}x^{34} - \frac{1}{35}x^{35} + \frac{1}{36}x^{36} - \frac{1}{37}x^{37} + \frac{1}{38}x^{38} - \frac{1}{39}x^{39} + \frac{1}{40}x^{40} - \frac{1}{41}x^{41} + \frac{1}{42}x^{42} - \frac{1}{43}x^{43} + \frac{1}{44}x^{44} - \frac{1}{45}x^{45} + \frac{1}{46}x^{46} - \frac{1}{47}x^{47} + \frac{1}{48}x^{48} - \frac{1}{49}x^{49} + \frac{1}{50}x^{50} - \frac{1}{51}x^{51} + \frac{1}{52}x^{52} - \frac{1}{53}x^{53} + \frac{1}{54}x^{54} - \frac{1}{55}x^{55} + \frac{1}{56}x^{56} - \frac{1}{57}x^{57} + \frac{1}{58}x^{58} - \frac{1}{59}x^{59} + \frac{1}{60}x^{60} - \frac{1}{61}x^{61} + \frac{1}{62}x^{62} - \frac{1}{63}x^{63} + \frac{1}{64}x^{64} - \frac{1}{65}x^{65} + \frac{1}{66}x^{66} - \frac{1}{67}x^{67} + \frac{1}{68}x^{68} - \frac{1}{69}x^{69} + \frac{1}{70}x^{70} - \frac{1}{71}x^{71} + \frac{1}{72}x^{72} - \frac{1}{73}x^{73} + \frac{1}{74}x^{74} - \frac{1}{75}x^{75} + \frac{1}{76}x^{76} - \frac{1}{77}x^{77} + \frac{1}{78}x^{78} - \frac{1}{79}x^{79} + \frac{1}{80}x^{80} - \frac{1}{81}x^{81} + \frac{1}{82}x^{82} - \frac{1}{83}x^{83} + \frac{1}{84}x^{84} - \frac{1}{85}x^{85} + \frac{1}{86}x^{86} - \frac{1}{87}x^{87} + \frac{1}{88}x^{88} - \frac{1}{89}x^{89} + \frac{1}{90}x^{90} - \frac{1}{91}x^{91} + \frac{1}{92}x^{92} - \frac{1}{93}x^{93} + \frac{1}{94}x^{94} - \frac{1}{95}x^{95} + \frac{1}{96}x^{96} - \frac{1}{97}x^{97} + \frac{1}{98}x^{98} - \frac{1}{99}x^{99} + \frac{1}{100}x^{100} - \frac{1}{101}x^{101} + \frac{1}{102}x^{102} - \frac{1}{103}x^{103} + \frac{1}{104}x^{104} - \frac{1}{105}x^{105} + \frac{1}{106}x^{106} - \frac{1}{107}x^{107} + \frac{1}{108}x^{108} - \frac{1}{109}x^{109} + \frac{1}{110}x^{110} - \frac{1}{111}x^{111} + \frac{1}{112}x^{112} - \frac{1}{113}x^{113} + \frac{1}{114}x^{114} - \frac{1}{115}x^{115} + \frac{1}{116}x^{116} - \frac{1}{117}x^{117} + \frac{1}{118}x^{118} - \frac{1}{119}x^{119} + \frac{1}{120}x^{120} - \frac{1}{121}x^{121} + \frac{1}{122}x^{122} - \frac{1}{123}x^{123} + \frac{1}{124}x^{124} - \frac{1}{125}x^{125} + \frac{1}{126}x^{126} - \frac{1}{127}x^{127} + \frac{1}{128}x^{128} - \frac{1}{129}x^{129} + \frac{1}{130}x^{130} - \frac{1}{131}x^{131} + \frac{1}{132}x^{132} - \frac{1}{133}x^{133} + \frac{1}{134}x^{134} - \frac{1}{135}x^{135} + \frac{1}{136}x^{136} - \frac{1}{137}x^{137} + \frac{1}{138}x^{138} - \frac{1}{139}x^{139} + \frac{1}{140}x^{140} - \frac{1}{141}x^{141} + \frac{1}{142}x^{142} - \frac{1}{143}x^{143} + \frac{1}{144}x^{144} - \frac{1}{145}x^{145} + \frac{1}{146}x^{146} - \frac{1}{147}x^{147} + \frac{1}{148}x^{148} - \frac{1}{149}x^{149} + \frac{1}{150}x^{150} - \frac{1}{151}x^{151} + \frac{1}{152}x^{152} - \frac{1}{153}x^{153} + \frac{1}{154}x^{154} - \frac{1}{155}x^{155} + \frac{1}{156}x^{156} - \frac{1}{157}x^{157} + \frac{1}{158}x^{158} - \frac{1}{159}x^{159} + \frac{1}{160}x^{160} - \frac{1}{161}x^{161} + \frac{1}{162}x^{162} - \frac{1}{163}x^{163} + \frac{1}{164}x^{164} - \frac{1}{165}x^{165} + \frac{1}{166}x^{166} - \frac{1}{167}x^{167} + \frac{1}{168}x^{168} - \frac{1}{169}x^{169} + \frac{1}{170}x^{170} - \frac{1}{171}x^{171} + \frac{1}{172}x^{172} - \frac{1}{173}x^{173} + \frac{1}{174}x^{174} - \frac{1}{175}x^{175} + \frac{1}{176}x^{176} - \frac{1}{177}x^{177} + \frac{1}{178}x^{178} - \frac{1}{179}x^{179} + \frac{1}{180}x^{180} - \frac{1}{181}x^{181} + \frac{1}{182}x^{182} - \frac{1}{183}x^{183} + \frac{1}{184}x^{184} - \frac{1}{185}x^{185} + \frac{1}{186}x^{186} - \frac{1}{187}x^{187} + \frac{1}{188}x^{188} - \frac{1}{189}x^{189} + \frac{1}{190}x^{190} - \frac{1}{191}x^{191} + \frac{1}{192}x^{192} - \frac{1}{193}x^{193} + \frac{1}{194}x^{194} - \frac{1}{195}x^{195} + \frac{1}{196}x^{196} - \frac{1}{197}x^{197} + \frac{1}{198}x^{198} - \frac{1}{199}x^{199} + \frac{1}{200}x^{200} - \frac{1}{201}x^{201} + \frac{1}{202}x^{202} - \frac{1}{203}x^{203} + \frac{1}{204}x^{204} - \frac{1}{205}x^{205} + \frac{1}{206}x^{206} - \frac{1}{207}x^{207} + \frac{1}{208}x^{208} - \frac{1}{209}x^{209} + \frac{1}{210}x^{210} - \frac{1}{211}x^{211} + \frac{1}{212}x^{212} - \frac{1}{213}x^{213} + \frac{1}{214}x^{214} - \frac{1}{215}x^{215} + \frac{1}{216}x^{216} - \frac{1}{217}x^{217} + \frac{1}{218}x^{218} - \frac{1}{219}x^{219} + \frac{1}{220}x^{220} - \frac{1}{221}x^{221} + \frac{1}{222}x^{222} - \frac{1}{223}x^{223} + \frac{1}{224}x^{224} - \frac{1}{225}x^{225} + \frac{1}{226}x^{226} - \frac{1}{227}x^{227} + \frac{1}{228}x^{228} - \frac{1}{229}x^{229} + \frac{1}{230}x^{230} - \frac{1}{231}x^{231} + \frac{1}{232}x^{232} - \frac{1}{233}x^{233} + \frac{1}{234}x^{234} - \frac{1}{235}x^{235} + \frac{1}{236}x^{236} - \frac{1}{237}x^{237} + \frac{1}{238}x^{238} - \frac{1}{239}x^{239} + \frac{1}{240}x^{240} - \frac{1}{241}x^{241} + \frac{1}{242}x^{242} - \frac{1}{243}x^{243} + \frac{1}{244}x^{244} - \frac{1}{245}x^{245} + \frac{1}{246}x^{246} - \frac{1}{247}x^{247} + \frac{1}{248}x^{248} - \frac{1}{249}x^{249} + \frac{1}{250}x^{250} - \frac{1}{251}x^{251} + \frac{1}{252}x^{252} - \frac{1}{253}x^{253} + \frac{1}{254}x^{254} - \frac{1}{255}x^{255} + \frac{1}{256}x^{256} - \frac{1}{257}x^{257} + \frac{1}{258}x^{258} - \frac{1}{259}x^{259} + \frac{1}{260}x^{260} - \frac{1}{261}x^{261} + \frac{1}{262}x^{262} - \frac{1}{263}x^{263} + \frac{1}{264}x^{264} - \frac{1}{265}x^{265} + \frac{1}{266}x^{266} - \frac{1}{267}x^{267} + \frac{1}{268}x^{268} - \frac{1}{269}x^{269} + \frac{1}{270}x^{270} - \frac$$



/

-

-

()

/

.

.

/

/

/

.

/

.

.

-

.

.

-

()

.

.

$$\frac{1}{\left(\frac{U_j}{U_i} \right)^{\frac{1}{\alpha}}}$$

()

(-)

.

.

.

.

.

.

.

					-	.
(×)	()	()	()	(×)		
-						
-						
-						

(×) () () () (×)

—

9

— —

•

[illegible]

[illegible]

:

()

.

:

(

- » ()

«

» ()

«

» ()

Grit - » ()

«

» ()

» ()

«

» ()

» ()

«

» ()

» ()

«

» ()

» ()

- (
- Andreosso, B., O. Callaghan and Gurqiang Yue (2004), "Intersectoral Linkages and Keysectors in China 1987-1997: An Application of Input- Output Analysis", *Asian Economic Journal*, Journal of the East Asian Economic Association, Vol. 78, June, pp. 165-186.
- Bulmer, M. (1982), *Input-Output Analysis in Developing Countries: Sources, Methods and Applications*, John Wiley and Sons.
- Dasgupta, Paramita and Debesh Chakraborty, (2005), "The Structure of the Indian Economy", 15 International Input-Output Conference, July 1- June 27.
- Dietzenbacher, E. and J. Vander Linden (1997), "Sectoral and Spatial Linkages in the EC Production Structure", *Journal of Regional Science*, Vol. 37, No. 2, pp. 235-57.
- Hirschman, A. O. (1958), "Inter-Dependence and Industrialization" in *The Strategy of Economic Development*, New Heaven, Yale University Press.

- Mattas, K. and Chandra M. Shrestha (1991), "A New Approach to Determining Sectoral Priorities in An Economy: Input-Output Elasticities", *Applied Economics*, Vol. 23, pp. 247-254.
- Reis, Rua and Antonio Hugo (2006), "An Input-Output Analysis: Linkages VS Leakages", Banco de Portugal, Working Paper, November.
- Sonis, M., J. GuiLhoto, G. Hewings, E. Martins (1995), "Linkages, Key Sectors and Structural Change: Some New Perspectives", *The Developing Economies*, XXXIII, No. 3, pp. 233-270.

- (
- Bidabadi, Bijan (2004), "Industrial Development Strategy and Stimulator Industry of Iran's Economy", Working Paper, <http://www.goeociies.com>.
- Drejer, Ina (2002), "Input-Output Based Measures of Inter-Industry Linkages Revisited", A Survey and Discussion, Center for Economic and Business Research, working paper, <http://www.cebr.dk>
- Pfajfar, Lotric and Leverenc Dolinar (2000), "Intersectoral Linkages in the Slovan Economy in the Years 1990, 1992, 1993 and 1995", 13 International Input-Output Conferences, <http://www.IIOA.org>
- Temurshoev, Umed (2004), "Key Sectors in the Krgyzstan Economy", Working Paper, <http://www.cerge-ei.cz>
- Valadkhani A. (2002), "Identifying Australia's High Employment Generating Industries, Queens Land University of Technology, School of Economics and Finance", Discussion paper, No. 119. <http://www.qut.edu.au>

